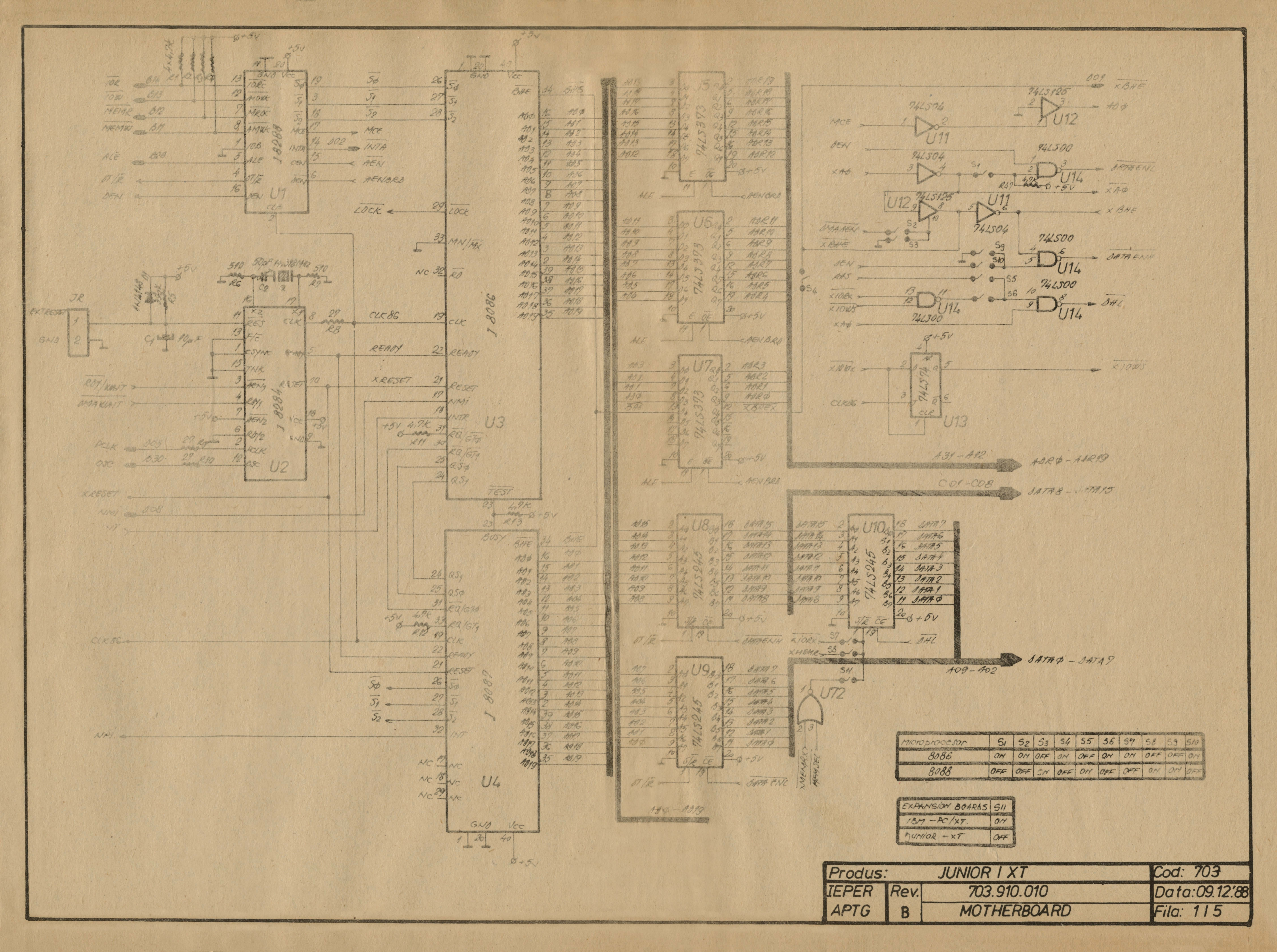
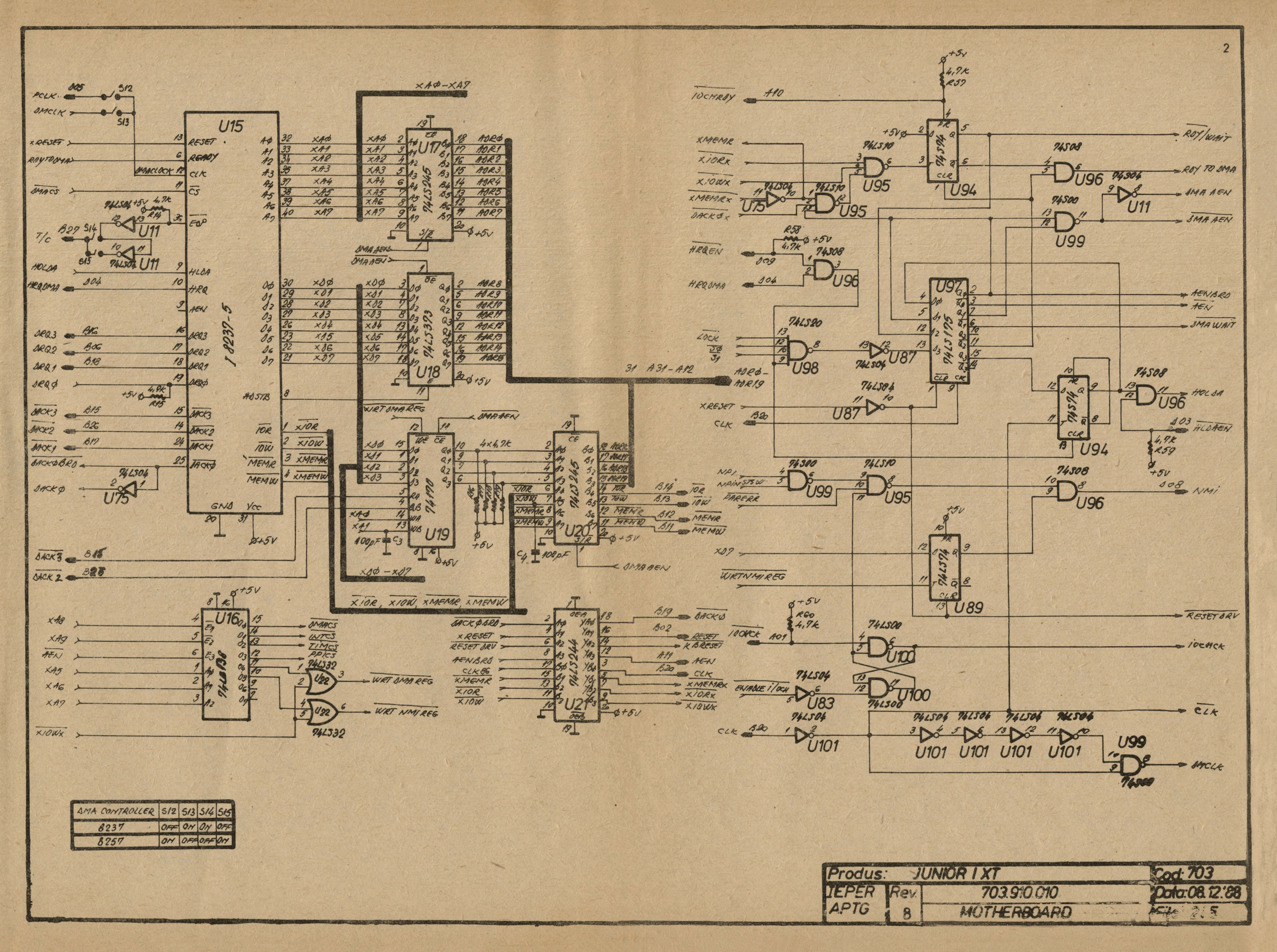


Microprocesor	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
8086	ON	ON	OFF	ON	OFF	ON	ON	OFF	OFF	ON
8088	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF

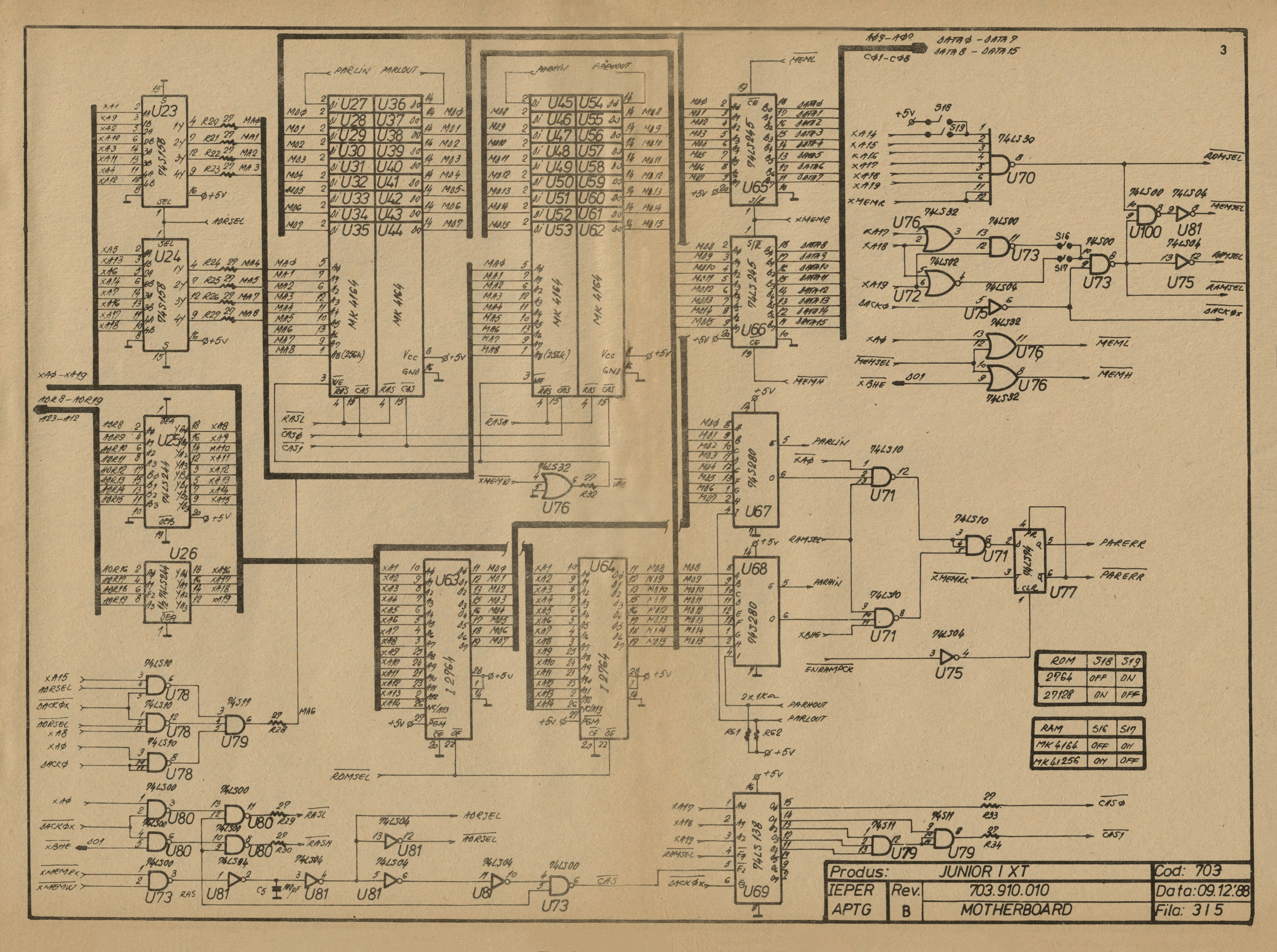
EXPANSION BOARDS	S11
IBM - PC/XT.	ON
JUNIOR - XT	OFF

Produs:	JUNIOR I XT		Cod: 703
IEPER	Rev.	703.910.010	Data: 09.12.'88
APTG	B	MOTHERBOARD	Fila: 1 / 5



ΔMA CONTROLLER	S12	S13	S14	S15
8237	OFF	ON	ON	OFF
8257	ON	OFF	OFF	ON

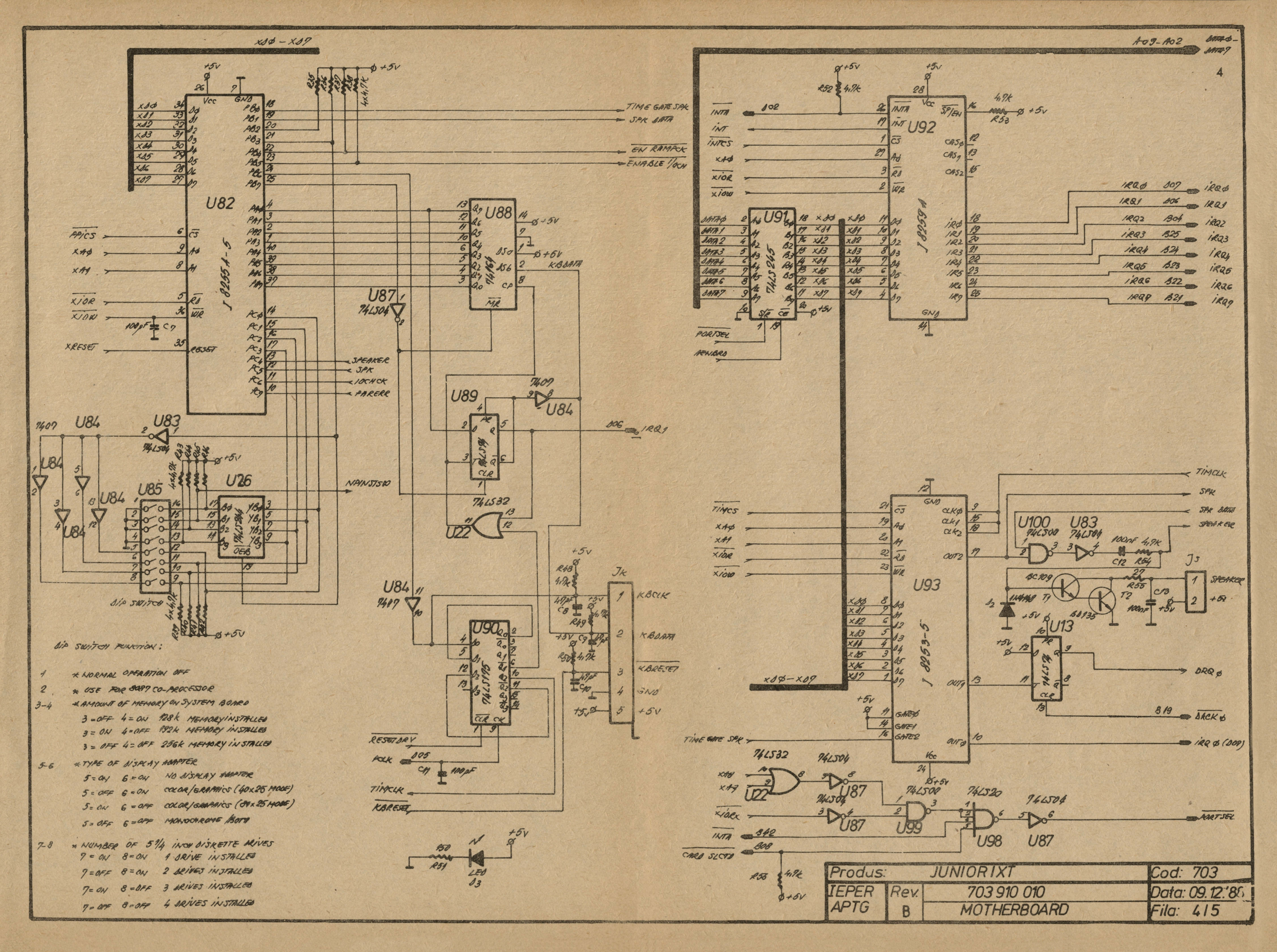
Produs:	JUNIOR I XT		Cod: 703
IEPER APTG	Rev. 8	703.910.010	Data: 08.12.'88
		MOTHERBOARD	File: 2/5

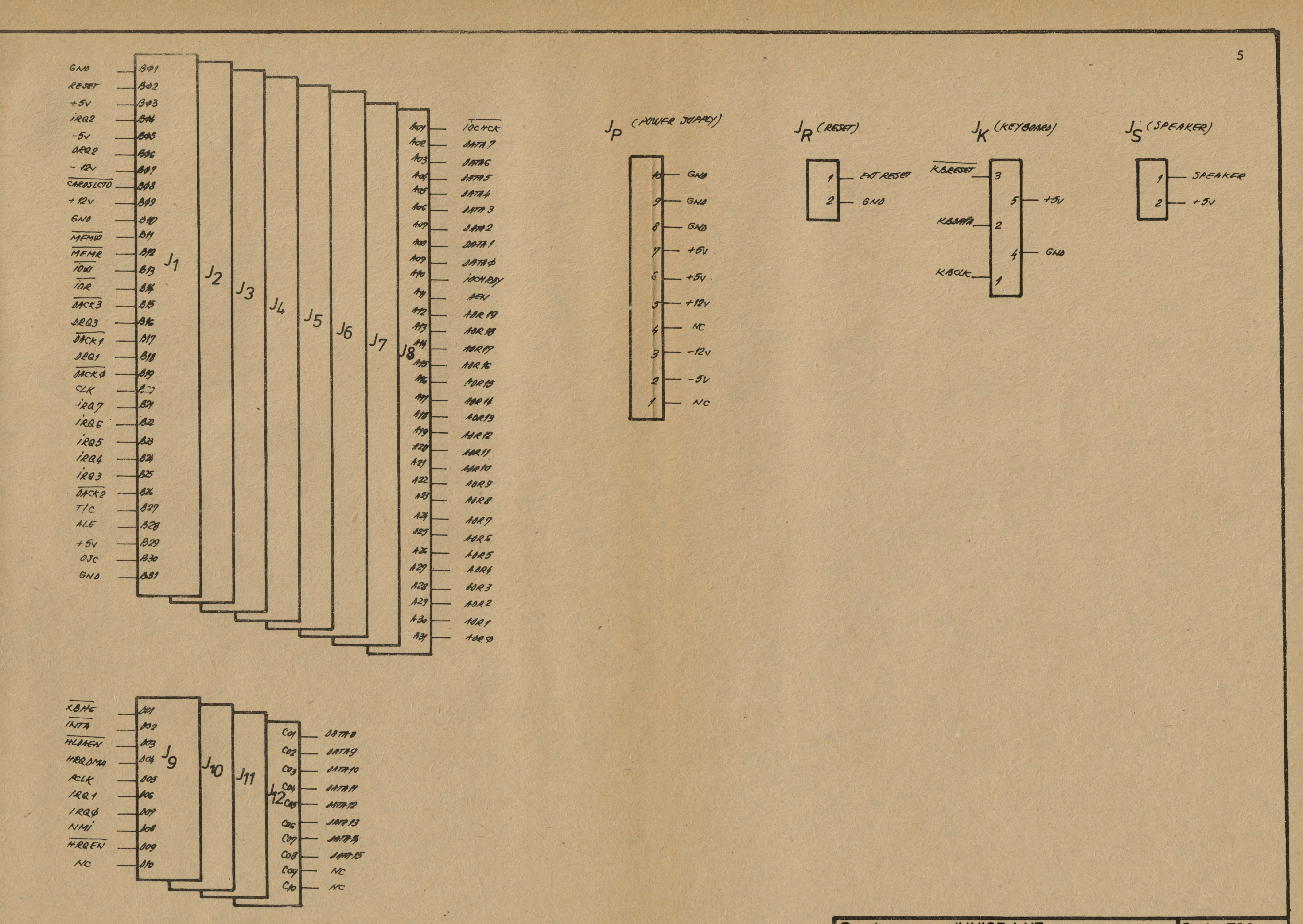


ROM	S18	S19
2764	OFF	ON
27128	ON	OFF

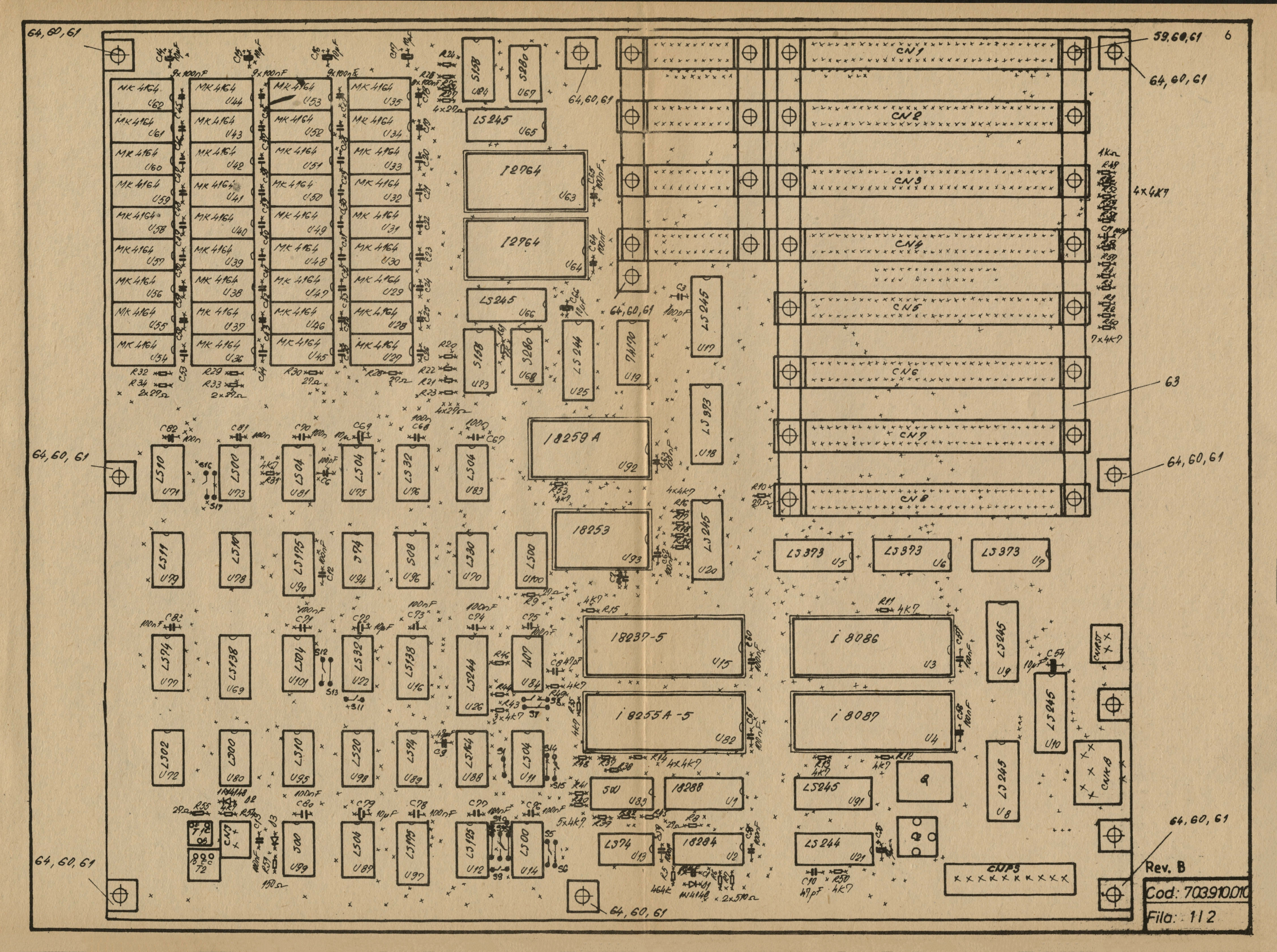
RAM	S16	S17
MK 4164	OFF	ON
MK 41256	ON	OFF

Produs:		JUNIOR I XT	Cod: 703
IEPER	Rev.	703.910.010	Data: 09.12.'88
APTG	B	MOTHERBOARD	Fila: 3/5


XD0 – XD7
A09 – A02
U82
I 8255A-5
U88
74164
U89
U84
U83
U85
U26
U87
U22
74LS32
U90
74LS175
U91
74LS245
U92
I 8259A
U93
I 8253-5
U100
74LS00
U13
U99
U98
U87
DIP SWITCH
TIME GATE SPK
SPK DATA
EN RAMPCK
ENABLE I/OCH
SPEAKER
SPK
IOCHCK
PARERR
KBDATA
IRQ1
NPNSTSTD
XRESET
XIOR
XIOW
PPICS
RESETDRV
PCLK
TIMCLK
KBRESET
KBCLK
KBDATA
KBRESET
GND
+5V
INTA
INT
INTCS
PORTSEL
AENBRD
IRQ0
IRQ1
IRQ2
IRQ3
IRQ4
IRQ5
IRQ6
IRQ7
TIMCS
TIMCLK
SPK
SPK DATA
SPEAKER
DRQ0
DACK0
IRQ0 (D07)
CARD SLCTD
PORTSEL
LED D3
DIP SWITCH FUNCTION:
1 * NORMAL OPERATION OFF
2 * USE FOR 8087 CO-PROCESSOR
3-4 * AMOUNT OF MEMORY ON SYSTEM BOARD
3 = OFF 4 = ON 128k MEMORY INSTALLED
3 = ON 4 = OFF 192k MEMORY INSTALLED
3 = OFF 4 = OFF 256k MEMORY INSTALLED
5-6 * TYPE OF DISPLAY ADAPTER
5 = ON 6 = ON NO DISPLAY ADAPTER
5 = OFF 6 = ON COLOR/GRAPHICS (40x25 MODE)
5 = ON 6 = OFF COLOR/GRAPHICS (80x25 MODE)
5 = OFF 6 = OFF MONOCHROME /BOTH
7-8 * NUMBER OF 5 1/4 INCH DISKETTE DRIVES
7 = ON 8 = ON 1 DRIVE INSTALLED
7 = OFF 8 = ON 2 DRIVES INSTALLED
7 = ON 8 = OFF 3 DRIVES INSTALLED
7 = OFF 8 = OFF 4 DRIVES INSTALLED
Produs: JUNIOR XT
Cod: 703
IEPER APTG
Rev. B
703 910 010
MOTHERBOARD
Data: 09.12.'88
Fila: 415



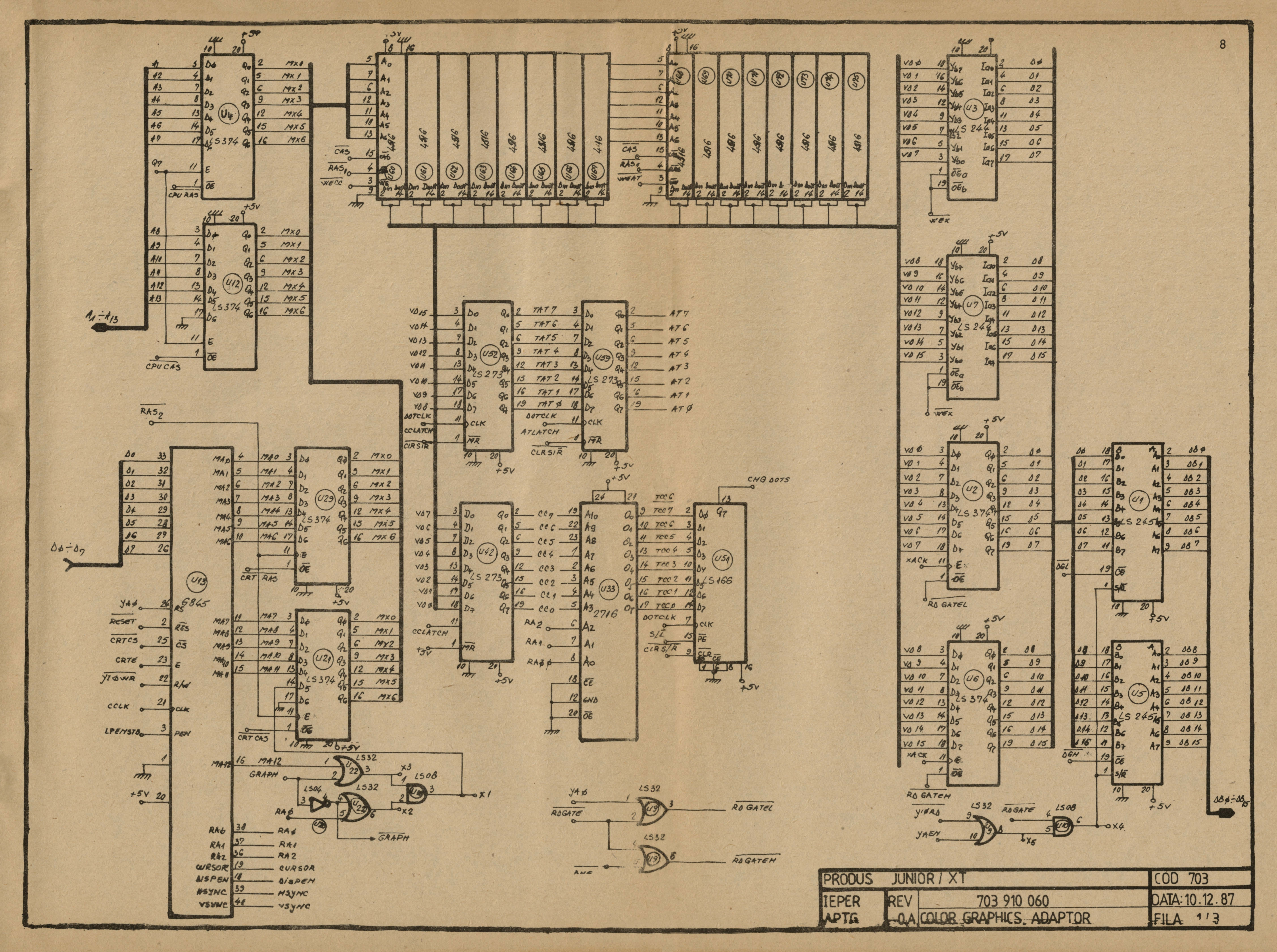
Produs:	JUNIOR I XT		Cod: 703
IEPER APTG	Rev. B	703.910.010 MOTHERBOARD	Data: 09.12.'88 Fila: 5/5


64, 60, 61
59, 60, 61
CN1
CN2
CN3
CN4
CN5
CN6
CN7
CN8
63
4x4K7
7x4K7
MK 4164
LS245
I2764
S188
S280
I8259A
I8253
LS244
LS373
74170
I8237-5
I8086
I8255A-5
I8087
I8288
I8284
LS374
LS245
LS244
CNP3
CNK-B
Rev. B
Cod: 703.910.010
Fila: 1/2

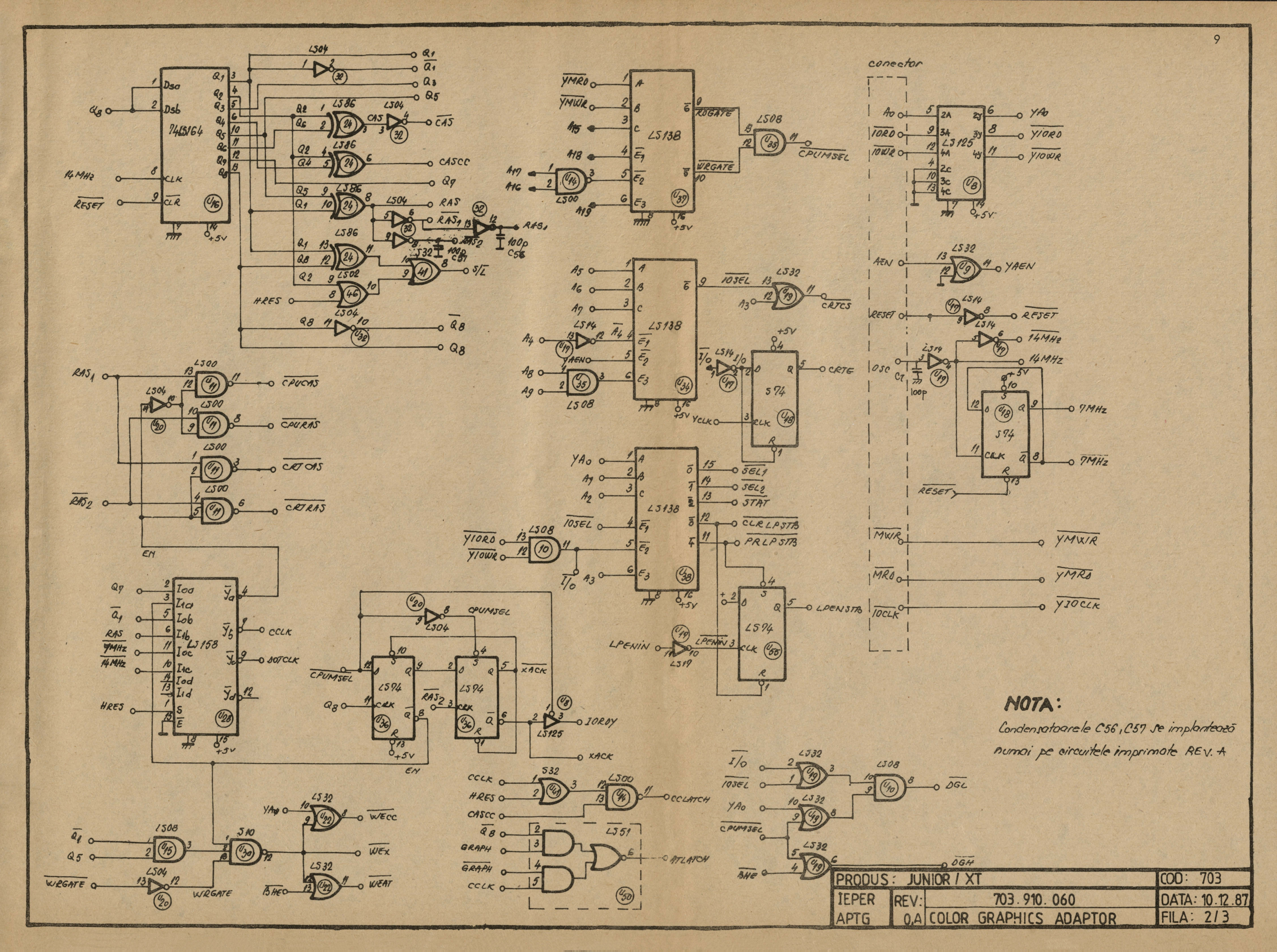
Poz	Simbol	Denumirea	Cod	Observatii	Cant
64		Distanțieri plagă	286.000.011.		9
63		Rigidizare	703.110.010		4
62	U4	Circuit integrat	i 8087	optional	1
61		Șaibă izolatoare	211010 xx		42
60		Piuliță hexagonală	316.110.030		33
59		Șurub M3 x 20	STAS 10295/80		24
58	CN1 ÷ CN8	Conector mamă	300.650		8
57	CNKB	Conector mamă 5 contacte	303.608 A		1
56	CN5, CNRST	Conector MOLEX tată 2 contacte	201.649		2
55	CNPS	Conector MOLEX tată 10 contacte	201.652		1
54	U85	Întrerupător prin translație	200.025 A		4
53	C2	Condensator 30-40 pF	CT 1010 V		1
52	U93	Soclu CI 24 pini	779.190.19		1
51	U63, U64, U92	Soclu CI 28 pini	779.190.20		3
50	U3, U4, U15, U82	Soclu CI 40 pini	779.190.21		4
49	Q	Cuarț 14,318 MHz			1
48	D3	Led	MDE 1101R		1
47	D1, D2	Diodă	1N4148		2
46	T1	Tranzistor	BC 107		1
45	T2	Tranzistor	BD 135		1
44	C69, C72, C79	Condensator 10µF/16V	CTSP 1042		11
	C1, C14÷C19, C54, C55, C66,				
	C73÷C78, C80÷C83				
	C60÷C65, C67, C68, C70, C71.				
43	C12, C13, C18÷C53, C55÷C58	Condensator 100nF/10%/50V	MX 3203		62
42	C8, C9, C10	Condensator 47pF/10%/50V	MC 3202		3
41	C3, C6, C7, C11	Condensator 100pF/10%/50V	MC 3202		4
40	R6, R7	Rezistență 510Ω/5%/0,25W	RPM 3025		2
39	R51	Rezistență 150Ω/5%/0,25W	RPM 3025		1
38	R8÷R10, R20÷R30, R32÷R34	Rezistență 27Ω/5%/0,25W	RPM 3025		17
37	R55	Rezistență 27Ω/2%/0,5W	RPM 3050		1
36	R5	Rezistență 464k/2%/0,25W	RPM 3085		1
35	R35÷R50, R5[illegible]÷R54, R56÷R[illegible]				

Poz	Simbol	Denumirea	Cod	Observatii	Cant.
	R1÷R4, R11÷R19, R31	Rezistență 4k7/5%/0,25W	RPM 3025		37
34	R61, R62	Rezistență 1k/5%/0,25W	RPM 3025		2
33	U84	Circuit integrat	CDB 407		1
32	U94	Circuit integrat	74S74	K531TM2P	1
31	U96	Circuit integrat	74S08	KM531LI1	1
30	U99	Circuit integrat	74S00	K531LA3P	1
29	U88	Circuit integrat	74LS164	K555IR8	1
28	U70	Circuit integrat	74LS30	K555LA2	1
27	U98	Circuit integrat	74LS20	K555LA1	1
26	U72	Circuit integrat	74LS02	K555LE1	1
25	U73, U77, U89	Circuit integrat	74LS74	K555TM2	3
24	U22, U76	Circuit integrat	74LS32	K555LL1	2
23	U79	Circuit integrat	74LS11	K555LI3	1
22	U71, U78, U95	Circuit integrat	74LS10	K555LA4	3
21	U74, U93, U80, U100	Circuit integrat	74LS00	K555LA3	4
20	U83, U87, U101	Circuit integrat	74LS04	K555LN1	6
	U11, U75, U81				
19	U12	Circuit integrat	74LS125	K555LP8	1
18	U90, U97	Circuit integrat	74LS175	K555TM8	2
17	U16, U69	Circuit integrat	74LS138	K555ID7	2
16	U19	Circuit integrat	74170	K155RP1	1
15	U23, U24	Circuit integrat	74S158/74S25[illegible]	K531RP[illegible]	2
14	U67, U68	Circuit integrat	74S280	K531IP5P	2
13	U21, U25, U26	Circuit integrat	74LS244	K555AP5	3
12	U5, U6, U7, U18	Circuit integrat	74LS373	K555IR22	4
11	U17, U20, U65, U66, U91,	Circuit integrat	74LS245	K555AP6	8
	U8, U9, U10				
10	U27÷U62	Circuit integrat	MK 4164	K565RU5G	36
9	U63, U64	Circuit integrat	i 2764/128	K573RF4/6	2
8	U2	Circuit integrat	i 8284	KR1810GF84	1
7	U1	Circuit integrat	i 8288	KR1810VG88	1
6	U92	Circuit integrat	i 8259 A	KR1810VN59A	1
5	U93	Circuit integrat	i 8253	KR580VI53	1
4	U82	Circuit integrat	i 8255A-5	KR580IK55	1
3	U15	Circuit integrat	i 8237-5		1
2	U3	Circuit integrat	i 8086	KR1810VM86	1
1		Circuit imprimat	703.910.011	Rev. B	1

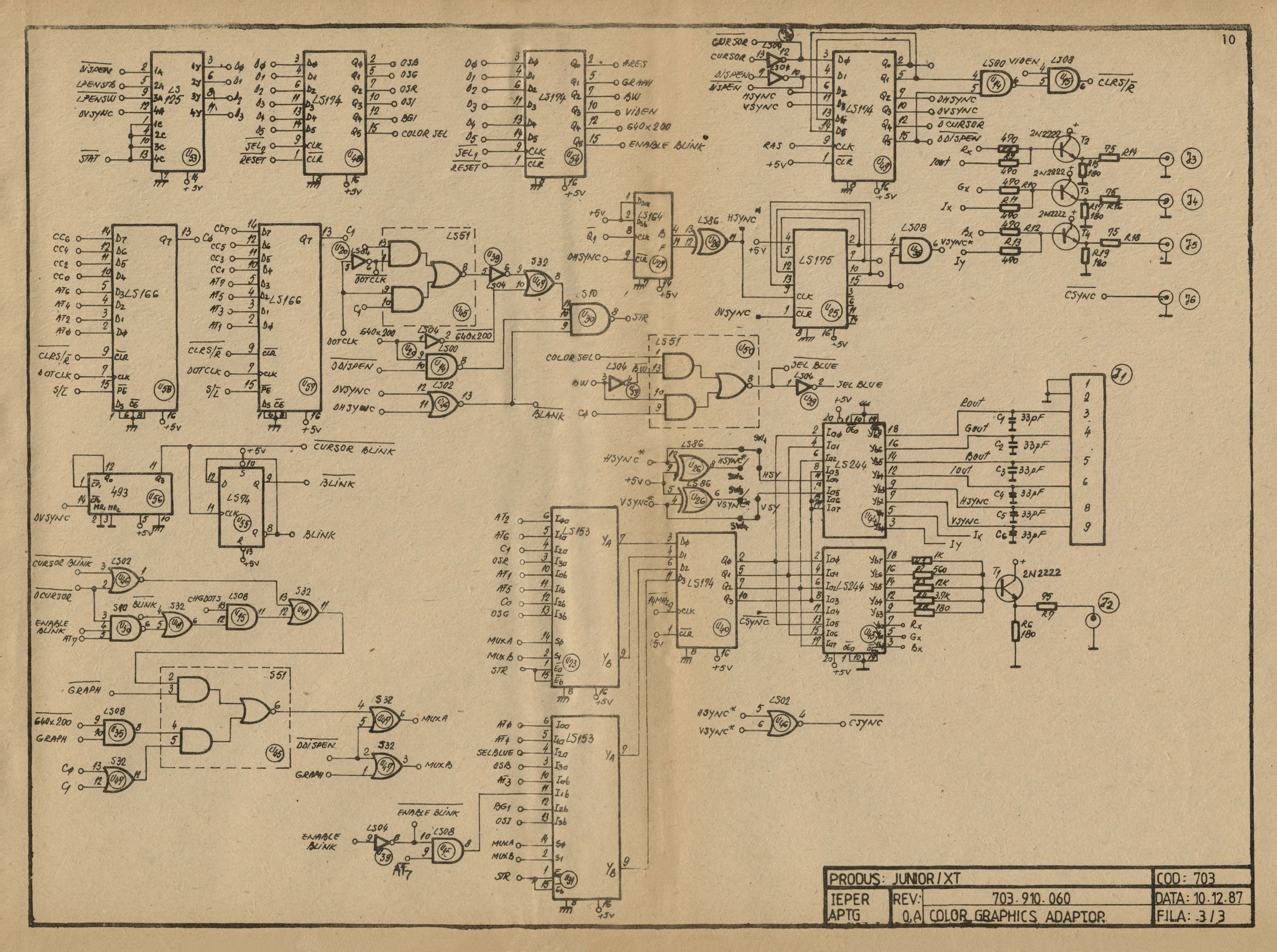
Produs:		JUNIOR-XT	Cod: 703
IEPER	Rev.	703 910 010	Data: 5.12.'88
APTG	B	MOTHERBOARD	Fila: 212

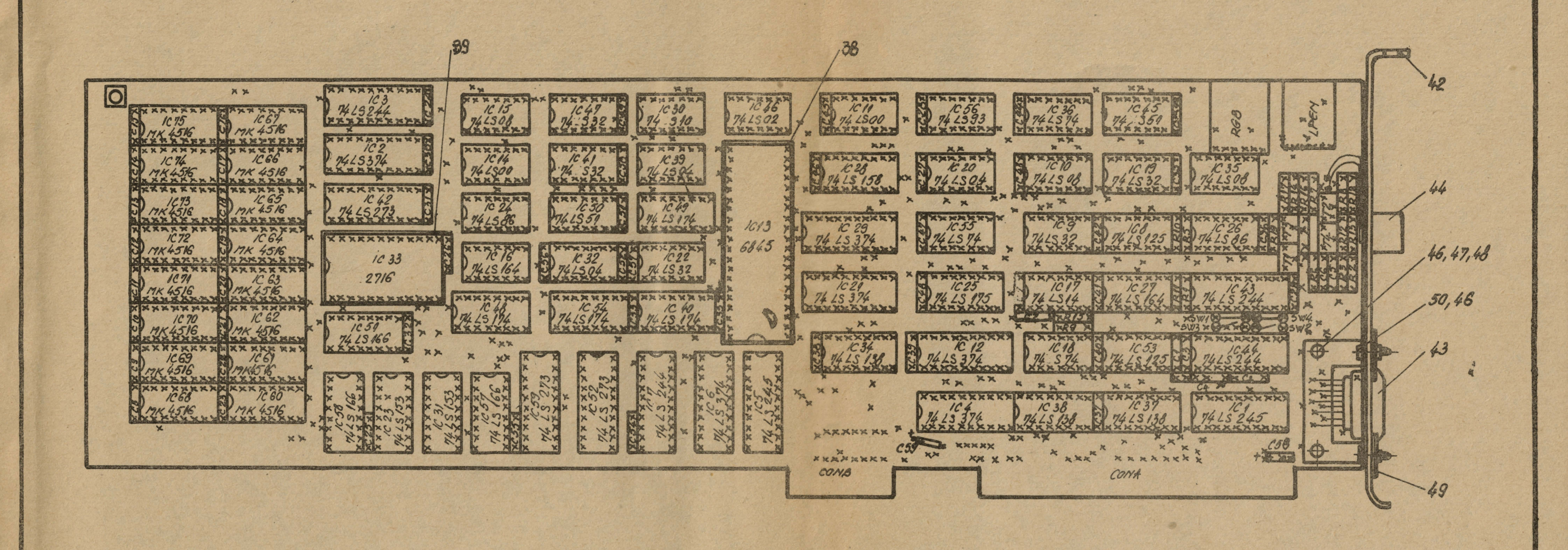


PRODUS JUNIOR / XT
COD 703
IEPER
APTG
REV
0A
703 910 060
COLOR GRAPHICS ADAPTOR
DATA: 10.12.87
FILA 1/3



74LS164
LS04
LS86
LS02
LS32
LS00
LS08
LS138
LS125
LS14
LS74
LS158
LS10
LS51
14MHz
RESET
CLK
CLR
+5V
CAS
CASCC
RAS
RAS1
RAS2
S/L
HRES
Q8
100p
C56
C57
YMRD
YMWR
RDGATE
WRGATE
CPUMSEL
IOSEL
CRTCS
AEN
YAEN
YCLK
CRTE
OSC
7MHz
SEL1
SEL2
STAT
CLRLPSTB
PRLPSTB
LPENSTB
LPENIN
YIORD
YIOWR
CPUCAS
CPURAS
CRTCAS
CRTRAS
CCLK
DOTCLK
EN
IORDY
XACK
WECC
WEX
WEAT
BHE
CCLATCH
ATLATCH
GRAPH
DGL
DGH
conector
MWR
MRD
IOCLK
YIOCLK
YMWR
YMRD
NOTA:
Condensatoarele C56, C57 se implantează numai pe circuitele imprimate REV. A
PRODUS: JUNIOR / XT
COD: 703
IEPER
APTG
REV:
0,A
703.910.060
COLOR GRAPHICS ADAPTOR
DATA: 10.12.87
FILA: 2/3


PRODUS: JUNIOR/XT
COD: 703
IEPER
APTG
REV:
703.910.060
DATA: 10.12.87
0.A
COLOR GRAPHICS ADAPTOR
FILA: 3/3
LS125
LS174
LS166
LS175
LS164
LS51
LS86
LS08
LS04
LS32
LS02
LS00
LS10
LS153
LS244
LS74
493
2N2222
CURSOR BLINK
BLINK
ENABLE BLINK
COLOR SEL
SEL BLUE
CLRS/R
HSYNC
VSYNC
CSYNC
DOTCLK
GRAPH
MUXA
MUXB
STR
BLANK
33pF
+5V

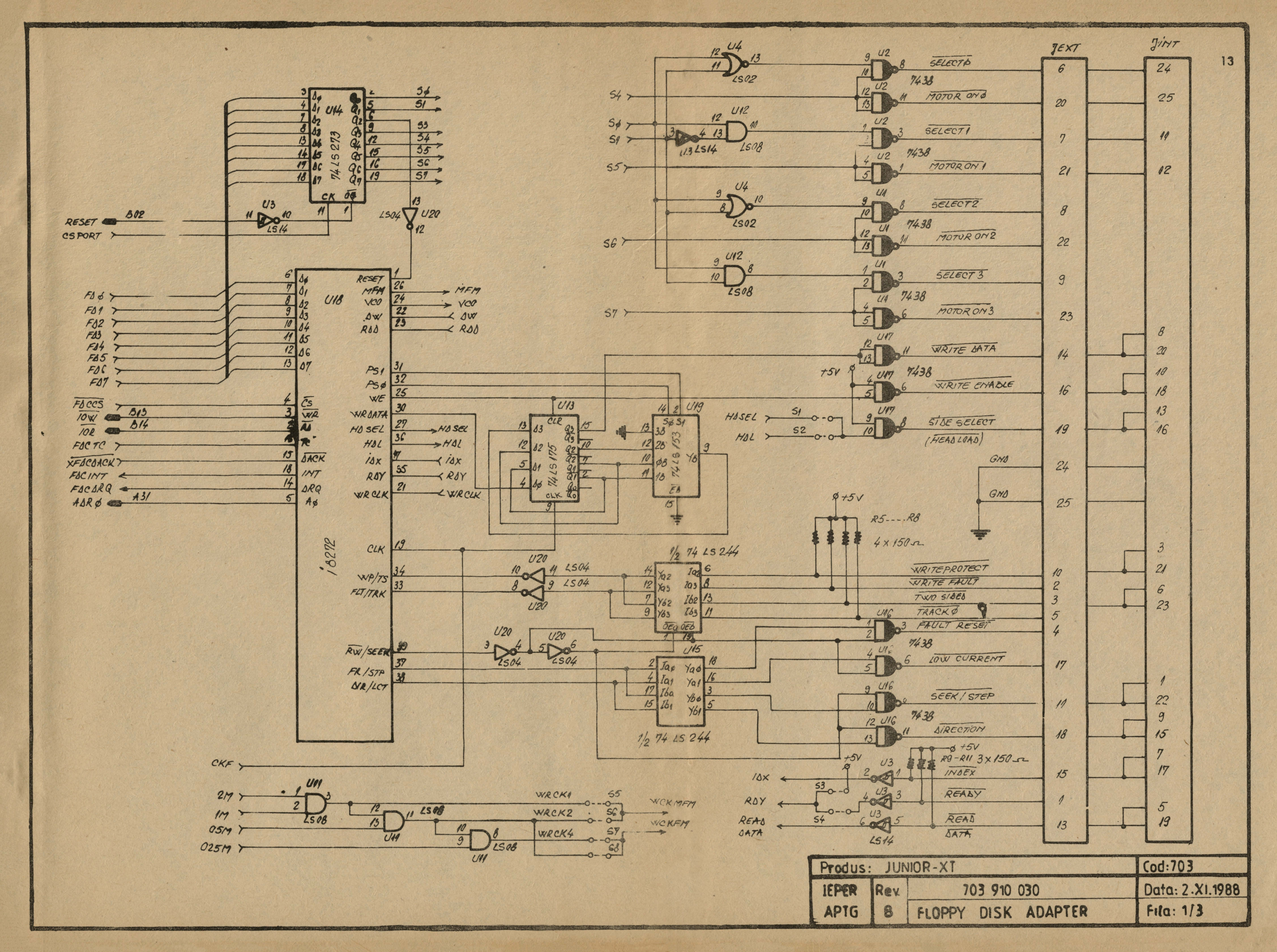


Produs - XT			Cod : 703
IEPER	Rev.	703 910 060	Data : 1.07.'88
APTG	0.A	COLOR GRAPHICS ADAPTOR	Fila 1/2

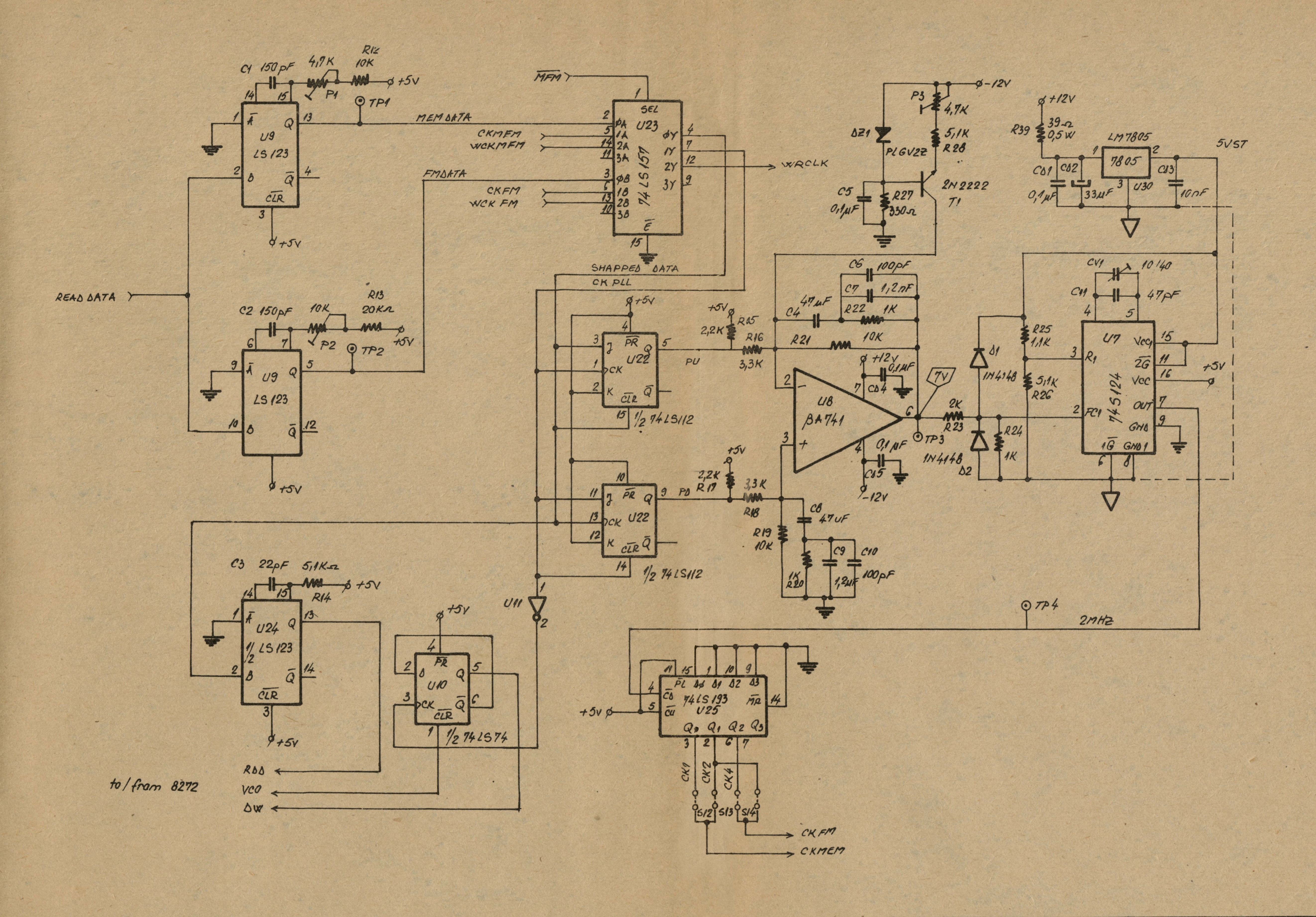
Poz	Simbol	Denumirea	Cod	Observatii	Cant
56	C56, C57, C7	Condensator 100p 10% 50V	MC 3202		3
55	IC18	Circuit integrat	74S74	K531TM2P	1
54	IC45	Circuit integrat	74S51	K531 LR11P	1
53	IC41, IC47	Circuit integrat	74S32	K531LL1P	2
52		Nit	342.400.303		2
51		Șurub M3x8	304.110.308		2
50		Șaibă plată φ3	332 110 030		2
49		Ureche cu filet	400 057		2
48		Șaibă izolatoare	2110 10xx		4
47		Piuliță hexagonală M3	316 110 030		4
46		Șurub M3x6	304 110 306		2
45		Circuit imprimat conector R.C.A.	703.910.244 rev φ		1
44		Conector R.C.A. mamă	200860		1
43		Conector rack 9 ct. m	200854		1
42		Suport conectori tip 2	703.110.009		1
41	RGB, LPEN	Conector tată 6 contacte	201189		2
40	C58 – C59	Condensator 33µ / [illegible]V/10%	CTSP [illegible]55		2
39	IC33	Soclu C.I 24 pini	7791[illegible]019		1
38	IC13	Soclu C.I 40 pini	77914021		1

Poz	Simbol	Denumirea	Cod	Observatii	Cant
37	T1÷T4	Tranzistor	2N2222		4
36	C8÷C55	Condensator 100n/10%/[illegible]	M2 3202		48
35	C1÷C6	Condensator 33p/[illegible]/[illegible]	MC 3202		6
34	R3	Rezistență 12K/5%/0,25W	RPM 3025		1
33	R4	Rezistență 3K7/5%/0,25W	RPM 3025		1
32	R1	Rezistență 1K2/5%/0,25W	RPM 3025		1
31	R2	Rezistență 560Ω/5%/0,25W	RPM 3025		1
30	R8÷R13	Rezistență 470Ω/5%/0,25W	RPM 3025		6
29	R5, R6, R15, R17, R19	Rezistență 180Ω/5%/0,25W	RPM 3025		5
28	R7, R14, R16, R18	Rezistență 75Ω/5%/0,25W	RPM 3025		4
27	IC56	Circuit integrat	C8 493	K555 IE5	1
26	IC24, IC26	Circuit integrat	74LS86	K555 LP5	2
25	IC36, IC55	Circuit integrat	74LS74	K555TM2	2
24	IC50	Circuit integrat	74LS51	K555LR11	1
23	IC9, IC19, IC22,	Circuit integrat	74LS32	K555LL1	3
22	IC17	Circuit integrat	74LS14	K555TL2	1
21	IC30	Circuit integrat	74S10	K531LA4P	1
20	IC10, IC15, IC35	Circuit integrat	74LS08	K555LI1	3
19	IC20, IC32, IC39,	Circuit integrat	74LS04	K555LN1	3
18	IC46	Circuit integrat	74LS02	K555LE1	1
17	IC11, IC14,	Circuit integrat	74LS00	K555LA3	2
16	IC8, IC53	Circuit integrat	74LS125	K555LP8	2
15	IC34, IC37, IC38	Circuit integrat	74LS138	K555ID7	3
14	IC23, IC31	Circuit integrat	74LS153	K555KP2	2
13	IC28	Circuit integrat	74LS258 / 74LS158	K555KP44P	1
12	IC16, IC27	Circuit integrat	74LS164	K555IR8	2
11	IC57, IC58, IC51	Circuit integrat	74LS166	K555IR10	3
10	IC40, IC48, IC49, IC54	Circuit integrat	74LS174	K555TM9	4
9	IC25	Circuit integrat	74LS175	K555TM8	1
8	IC3, IC7, IC43, IC44	Circuit integrat	74LS244	K555AP5	4
7	IC1, IC5	Circuit integrat	74LS245	K555AP6	2
6	IC60÷IC75	Circuit integrat	MK 4516	K565RU6	16
5	IC42, IC52, IC59	Circuit integrat	74LS273		3
4	IC2, IC4, IC6, IC12, IC21, IC29	Circuit integrat	74LS374	K555IR23	6
3	IC33	Circuit integrat	2716	K573RФ2	1
2	IC13	Circuit integrat	6845		1
1		Circuit imprimat	703.910.061	Rev. A	1

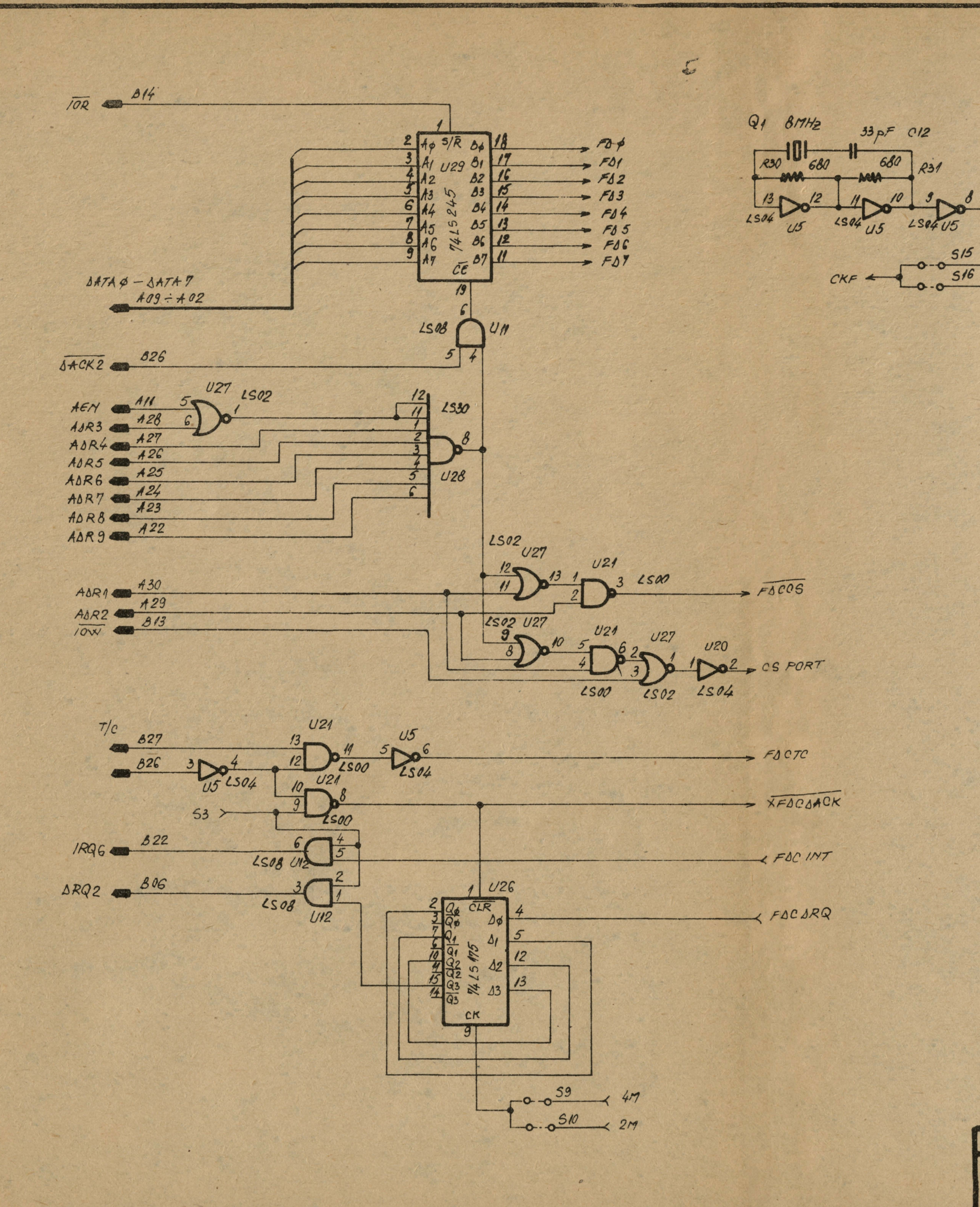
Produs: JUNIOR - XT			Cod: 703
IEPER APTG.	Rev. 0.A	703 910 060	Data: 1.07.88
		COLOR GRAPHICS ADAPTOR	Fila: 2/2



Produs: JUNIOR-XT		Cod:703
IEPER APTG	Rev. B	703 910 030 FLOPPY DISK ADAPTER	Data: 2.XI.1988 Fila: 1/3



Produs: JUNIOR-XT			Cod: 703
IEPER	Rev.	703 910 030	Data: 2. XI. 1988
APTG	B	FLOPPY DISK ADAPTER	Fila: 2/3



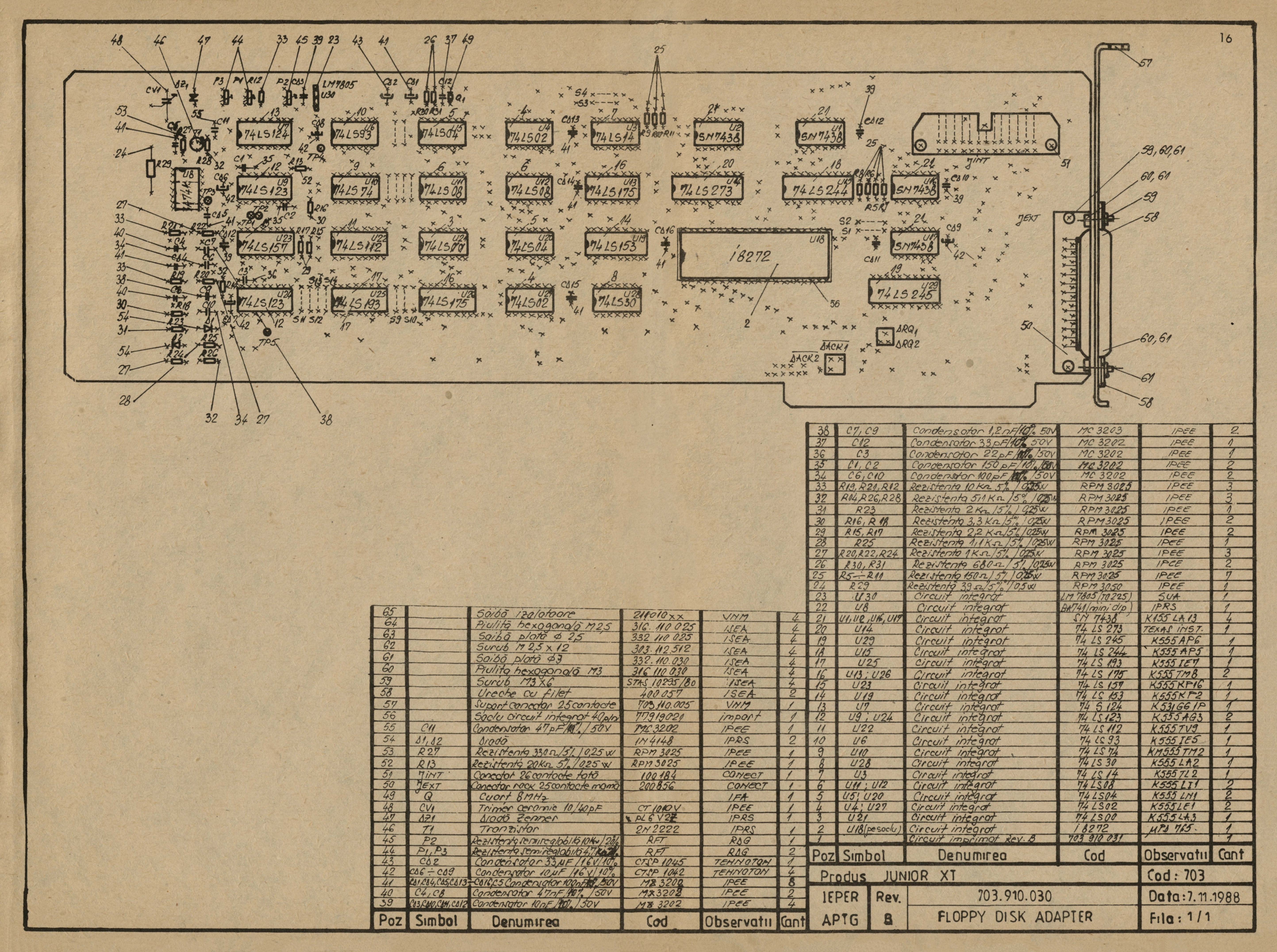
1. DRIVE TYPE

a/ SINGLE SIDED	DOUBLE SIDED
S1 — OFF S2 — ON	S1 — ON S2 — OFF
b/ 5.25 inch	**8 inch**
S5 — OFF S6 — ON	S5 — ON S6 — OFF
S7 — ON S8 — OFF	S7 — OFF S8 — ON
S9 — OFF S10 — ON	S9 — ON S10 — OFF
S11 — OFF S12 — ON	S11 — ON S12 — OFF
S13 — ON S14 — OFF	S13 — OFF S14 — ON
S15 — ON S16 — OFF	S15 — OFF S16 — ON

2. READY SIGNAL

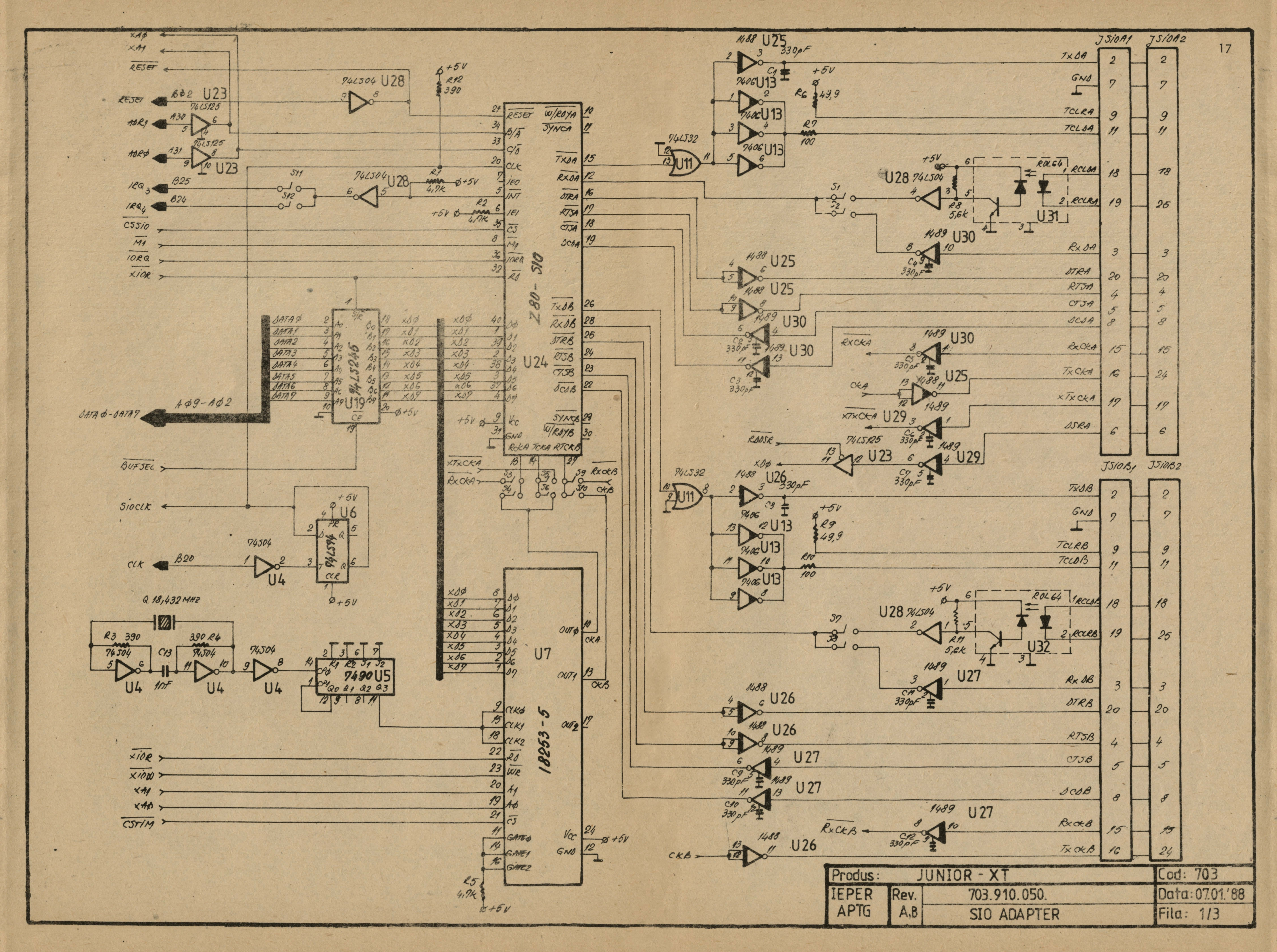
DON'T CARE	FROM DRIVE
S3 — ON S4 — OFF	S3 — OFF S4 — ON

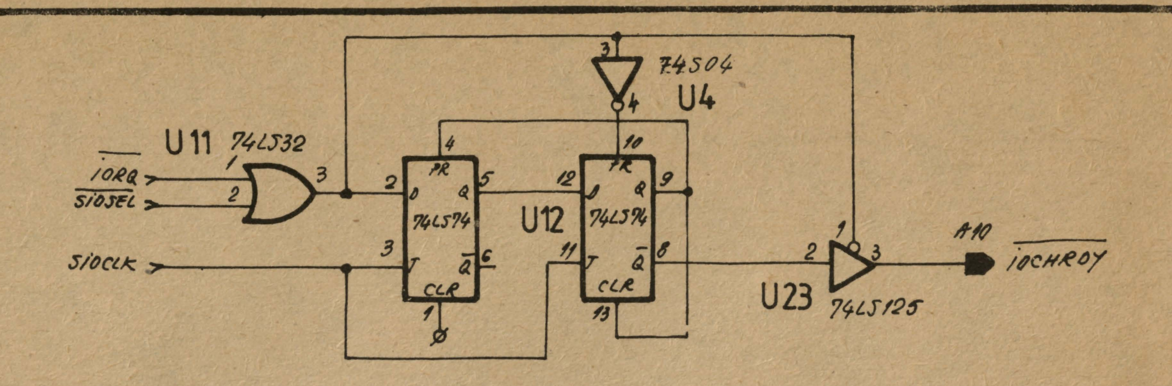
Produs: JUNIOR-XT			Cod: 703
IEPER	Rev.	703 910 030	Data: 2. XI. 1988
APTG	B	FLOPPY DISK ADAPTER	Fila: 3/3

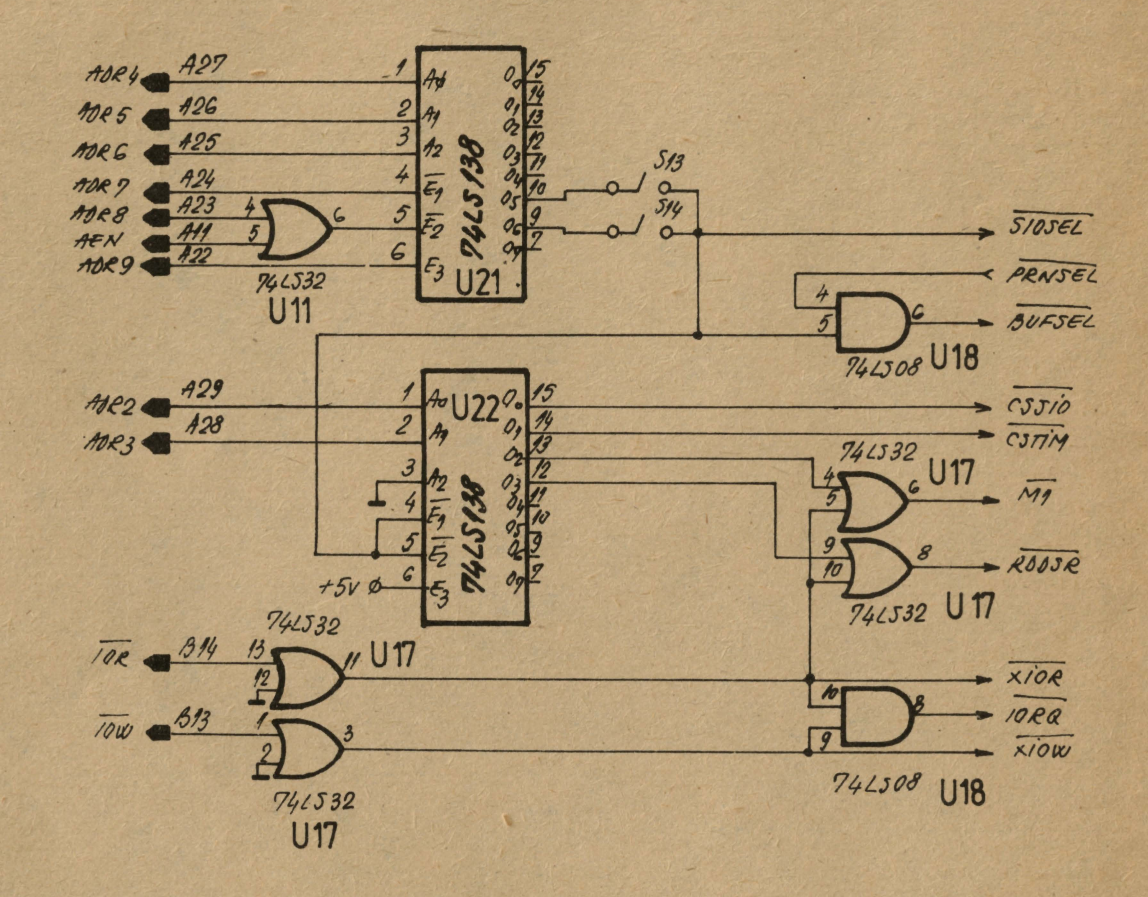


Poz	Simbol	Denumirea	Cod	Observatii	Cant
65		Saibă izolatoare	211010xx	VNM	4
64		Piulită hexagonală M2,5	316.110 025	ISEA	4
63		Saibă plată ϕ 2,5	332 110 025	ISEA	4
62		Surub M 2,5 x 12	303.112.512	ISEA	4
61		Saibă plată ϕ3	332.110.030	ISEA	4
60		Piulită hexagonală M3	316 110 030	ISEA	4
59		Surub M3x6	STAS 10295/80	ISEA	4
58		Ureche cu filet	400 057	ISEA	2
57		Suport conector 25 contacte	703.110.005	VNM	1
56		Soclu circuit integrat 40 pini	77919021	import	1
55	C11	Condensator 47pF/10%/50V	MC 3202	IPEE	1
54	Δ1, Δ2	Diodă	1N4148	IPRS	2
53	R27	Rezistentă 330Ω/5%/0,25W	RPM 3025	IPEE	1
52	R13	Rezistentă 20KΩ 5%/0,25W	RPM 3025	IPEE	1
51	J INT	Conector 26 contacte tată	100 184	CONECT	1
50	J EXT	Conector rack 25 contacte mamă	200 856	CONECT	1
49	Q	Cuarț 8MHz		IFA	1
48	CV1	Trimer ceramic 10/40pF	CT 1010V	IPEE	1
47	ΔZ1	Diodă Zenmer	PL6V2	IPRS	1
46	T1	Tranzistor	2N 2222	IPRS	1
45	P2	Rezistentă semireglabilă 10KΩ/20%	RFT	RAG	1
44	P1, P3	Rezistentă semireglabilă 4,7Kn/20%	RFT	RAG	2
43	CΔ2	Condensator 33μF/16V/10%	CTSP 1045	TEHNOTON	1
42	CΔ6 ÷ CΔ9	Condensator 10μF/16V/10%	CTSP 1042	TEHNOTON	4
41	CΔ1, CΔ4, CΔ5, CΔ13 ÷ CΔ16, C5	Condensator 100nF/10%/50V	M8 3202	IPEE	8
40	C4, C8	Condensator 47nF/10%/50V	M8 3202	IPEE	2
39	CΔ3, CΔ10, CΔ11, CΔ12	Condensator 10nF/10%/50V	M8 3202	IPEE	4
38	C7, C9	Condensator 1,2nF/10%/50V	MC 3203	IPEE	2
37	C12	Condensator 33pF/10%/50V	MC 3202	IPEE	1
36	C3	Condensator 22pF/10%/50V	MC 3202	IPEE	1
35	C1, C2	Condensator 150pF/10%/50V	MC 3202	IPEE	2
34	C6, C10	Condensator 100pF/10%/50V	MC 3202	IPEE	2
33	R19, R21, R12	Rezistenta 10KΩ 5%/0,25W	RPM 3025	IPEE	3
32	R14, R26, R28	Rezistenta 5,1KΩ/5%/0,25W	RPM 3025	IPEE	3
31	R23	Rezistenta 2KΩ/5%/0,25W	RPM 3025	IPEE	1
30	R16, R18	Rezistenta 3,3KΩ/5%/0,25W	RPM 3025	IPEE	2
29	R15, R17	Rezistenta 2,2KΩ/5%/0,25W	RPM 3025	IPEE	2
28	R25	Rezistenta 1,1KΩ/5%/0,25W	RPM 3025	IPEE	1
27	R20, R22, R24	Rezistenta 1KΩ/5%/0,25W	RPM 3025	IPEE	3
26	R30, R31	Rezistenta 680Ω/5%/0,25W	RPM 3025	IPEE	2
25	R5 ÷ R11	Rezistenta 150Ω/5%/0,25W	RPM 3025	IPEE	7
24	R29	Rezistenta 39Ω/5%/0,5W	RPM 3050	IPEE	1
23	U30	Circuit integrat	LM 7805 (TO225)	SUA	1
22	U8	Circuit integrat	BA741 (mini dip)	IPRS	1
21	U1, U2, U16, U17	Circuit integrat	SN 7438	K155 LA 13	4
20	U14	Circuit integrat	74 LS 273	TEXAS INST.	1
19	U29	Circuit integrat	74 LS 245	K555 AP6	1
18	U15	Circuit integrat	74 LS 244	K555 AP5	1
17	U25	Circuit integrat	74 LS 193	K555 IE7	1
16	U13; U26	Circuit integrat	74 LS 175	K555 TM8	2
15	U23	Circuit integrat	74 LS 157	K555 KP16	1
14	U19	Circuit integrat	74 LS 153	K555 KP2	1
13	U7	Circuit integrat	74 S 124	K531 GG1P	1
12	U9; U24	Circuit integrat	74 LS 123	K555 AG3	2
11	U22	Circuit integrat	74 LS 112	K555 TV9	1
10	U6	Circuit integrat	74 LS 93	K555 IE5	1
9	U10	Circuit integrat	74 LS 74	KM555 TM2	1
8	U28	Circuit integrat	74 LS 30	K555 LA2	1
7	U3	Circuit integrat	74 LS 14	K555 TL2	1
6	U11; U12	Circuit integrat	74 LS 08	K555 LI1	2
5	U5; U20	Circuit integrat	74 LS 04	K555 LN1	2
4	U4; U27	Circuit integrat	74 LS 02	K555 LE1	2
3	U21	Circuit integrat	74 LS 00	K555 LA3	1
2	U18 (pe soclu)	Circuit integrat	i 8272	μPD 765	1
1		Circuit imprimat Rev. B	703 910 031		1

Produs JUNIOR XT			Cod: 703
IEPER	Rev.	703.910.030	Data: 7.11.1988
APTG	B	FLOPPY DISK ADAPTER	Fila: 1/1


Produs: JUNIOR - XT
Cod: 703
IEPER APTG
Rev. A,B
703.910.050.
SIO ADAPTER
Data: 07.01.'88
Fila: 1/3
Z80 - SIO
U24
18253 - 5
U7
74LS245
U19
7490 U5
74LS74
U6
JSIOA1
JSIOA2
JSIOB1
JSIOB2
Q 18,432 MHz
DATA0-DATA7
A09-A02
RESET
IRQ3
IRQ4
CSSIO
M1
IORQ
XIOR
XIOW
BUFSEL
SIOCLK
CLK
CSTIM
TxDA
GND
TCLRA
TCLDA
RCLDA
RCLRA
RxDA
DTRA
RTSA
CTSA
DCDA
RxCkA
TxCkA
XTxCkA
DSRA
TxDB
TCLRB
TCLDB
RxDB
DTRB
RTSB
CTSB
DCDB
RxCkB
TxCkB
ROL64
U31
U32





STRAP 11 – 14 CONFIGURATION (SIO ADAPTER ADDRESS):

ADDRESS	S11	S12	S13	S14
250 – 25F	OFF	ON	ON	OFF
260 – 26F	ON	OFF	OFF	ON

STRAP S1 – S2 CONFIGURATION (SIOA INTERFACE TYPE):

INTERFACE TYPE	S1	S2
CCITT – V24	OFF	ON
CURRENT LOOP.	ON	OFF

STRAP S7 – S8 CONFIGURATION (SIOB INTERFACE TYPE):

INTERFACE TYPE	S7	S8
CCITT – V24	OFF	ON
CURRENT LOOP	ON	OFF

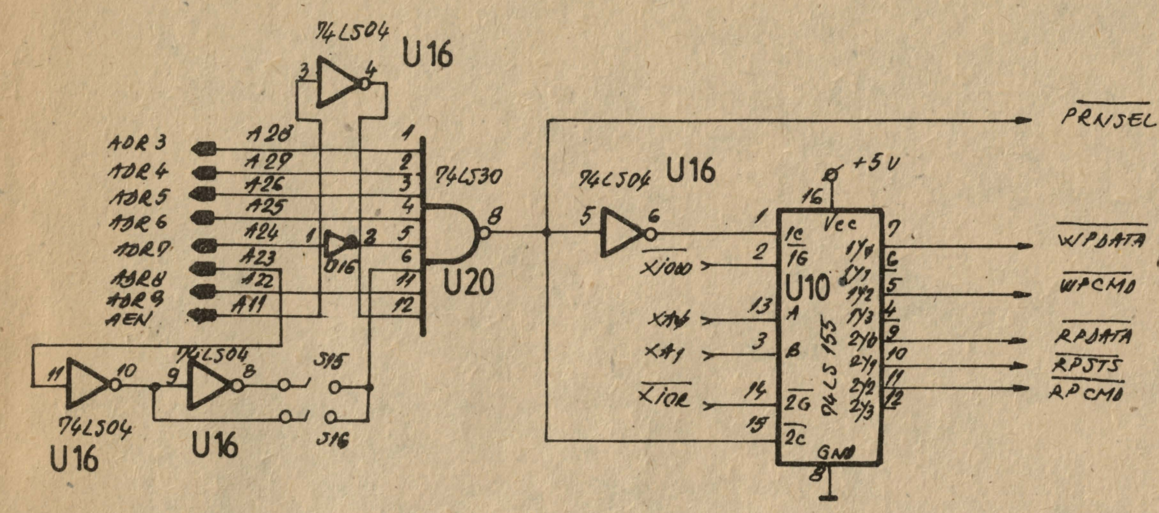
STRAP S3 – S6 CONFIGURATION (SIOA ASYNC/SYNC MODE):

MODE	S3	S4	S5	S6
ASYNC	OFF	ON	OFF	ON
SYNC	ON	OFF	ON	OFF

STRAP S9 – S10 CONFIGURATION (SIOB ASYNC/SYNC MODE):

MODE	S9	S10
ASYNC	OFF	ON
SYNC	ON	OFF

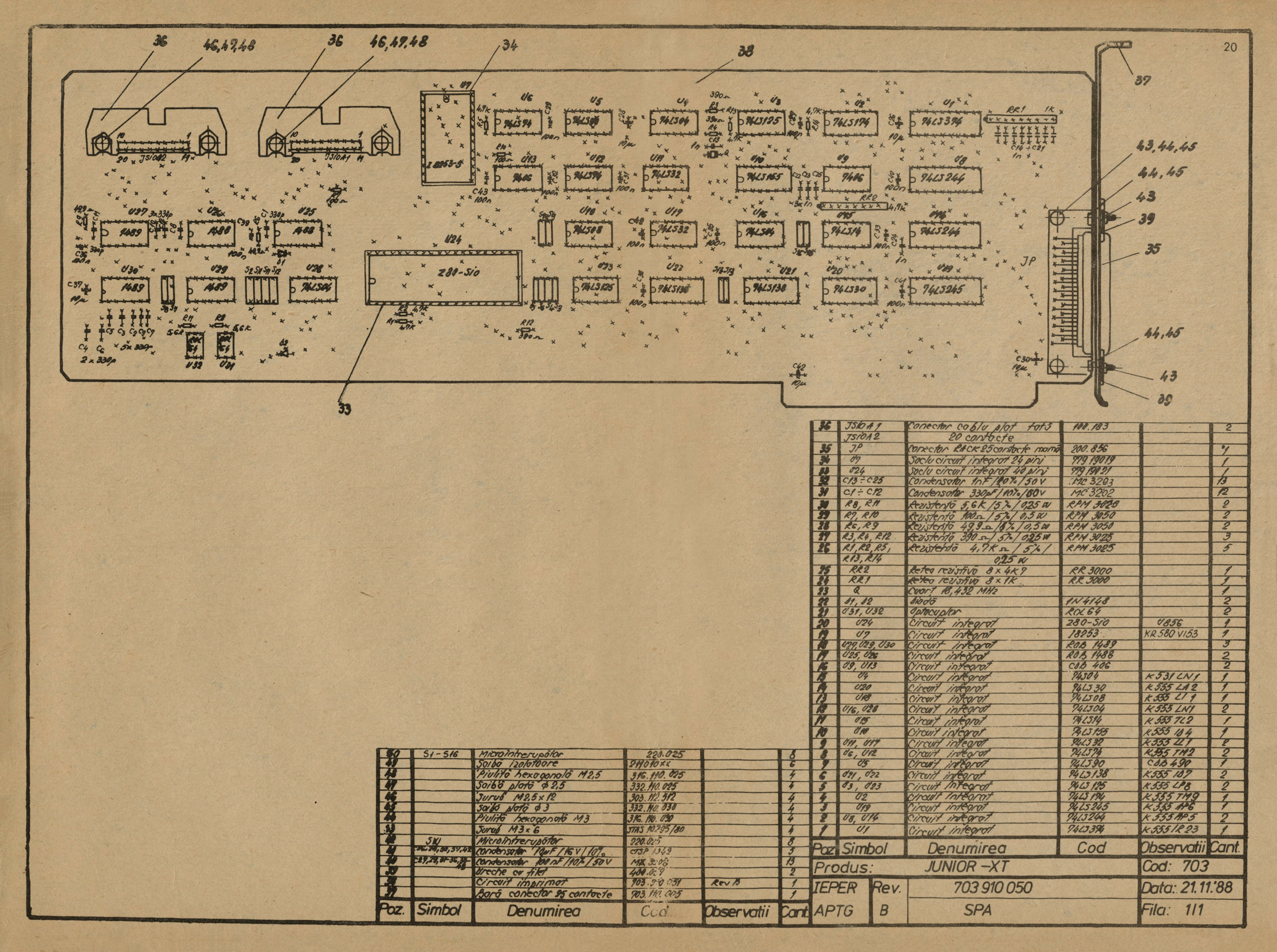
Produs:		JUNIOR-XT	Cod: 703
IEPER	Rev.	703.910.050.	Data: 07.01.'88
APTG	A,B	SIO ADAPTER	Fila: 2/3



STRAP S15-S16 CONFIGURATION (PRINTER ADAPTER ADDRESS):

ADDRESS	S15	S16
278	OFF	ON
378	ON	OFF

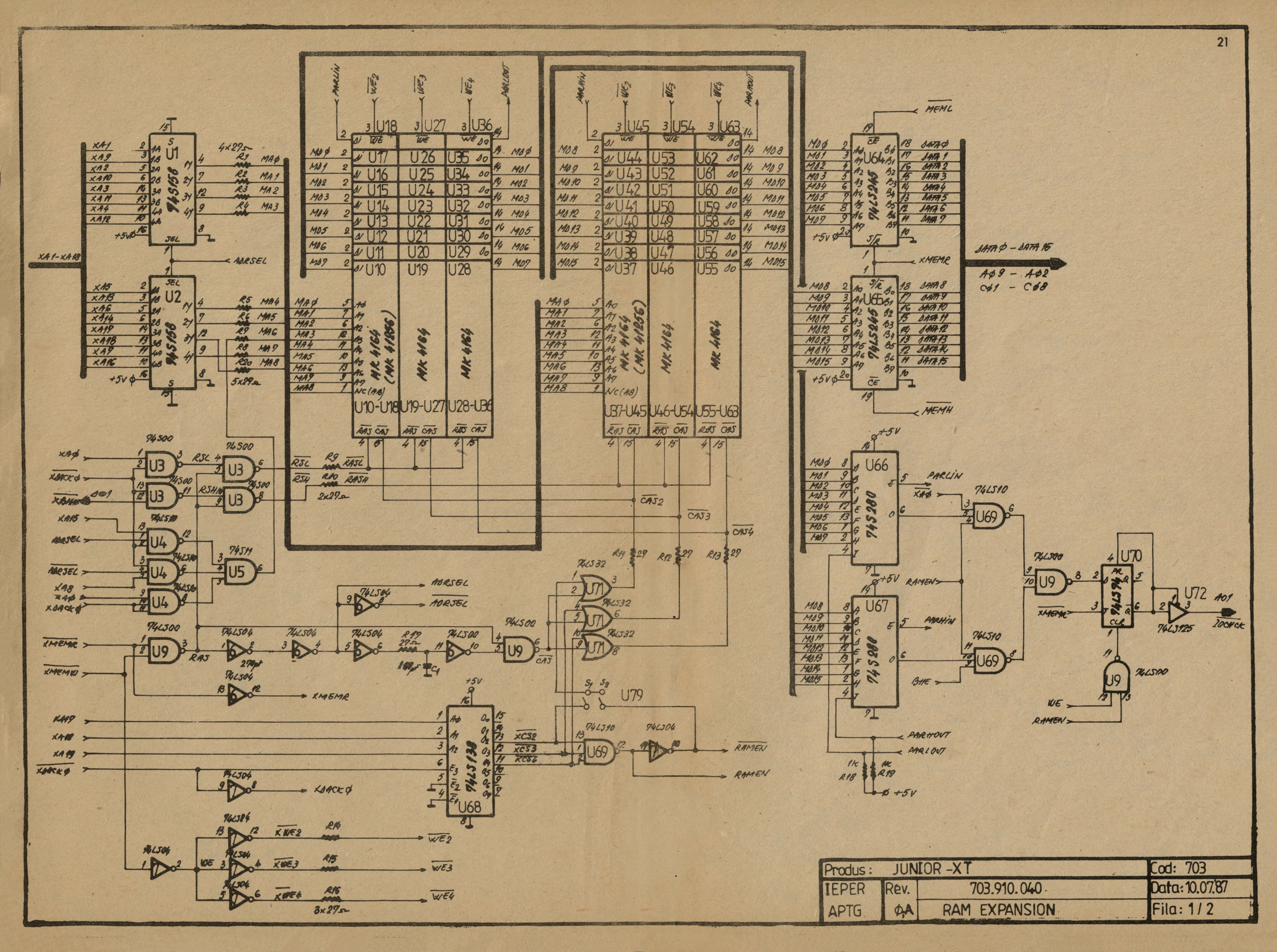
Produs:	JUNIOR / XT		Cod: 703
IEPER	Rev.	703.910.050	Data: 07.01.88
APTG	A,B	PRINTER ADAPTER	Fila: 3/3

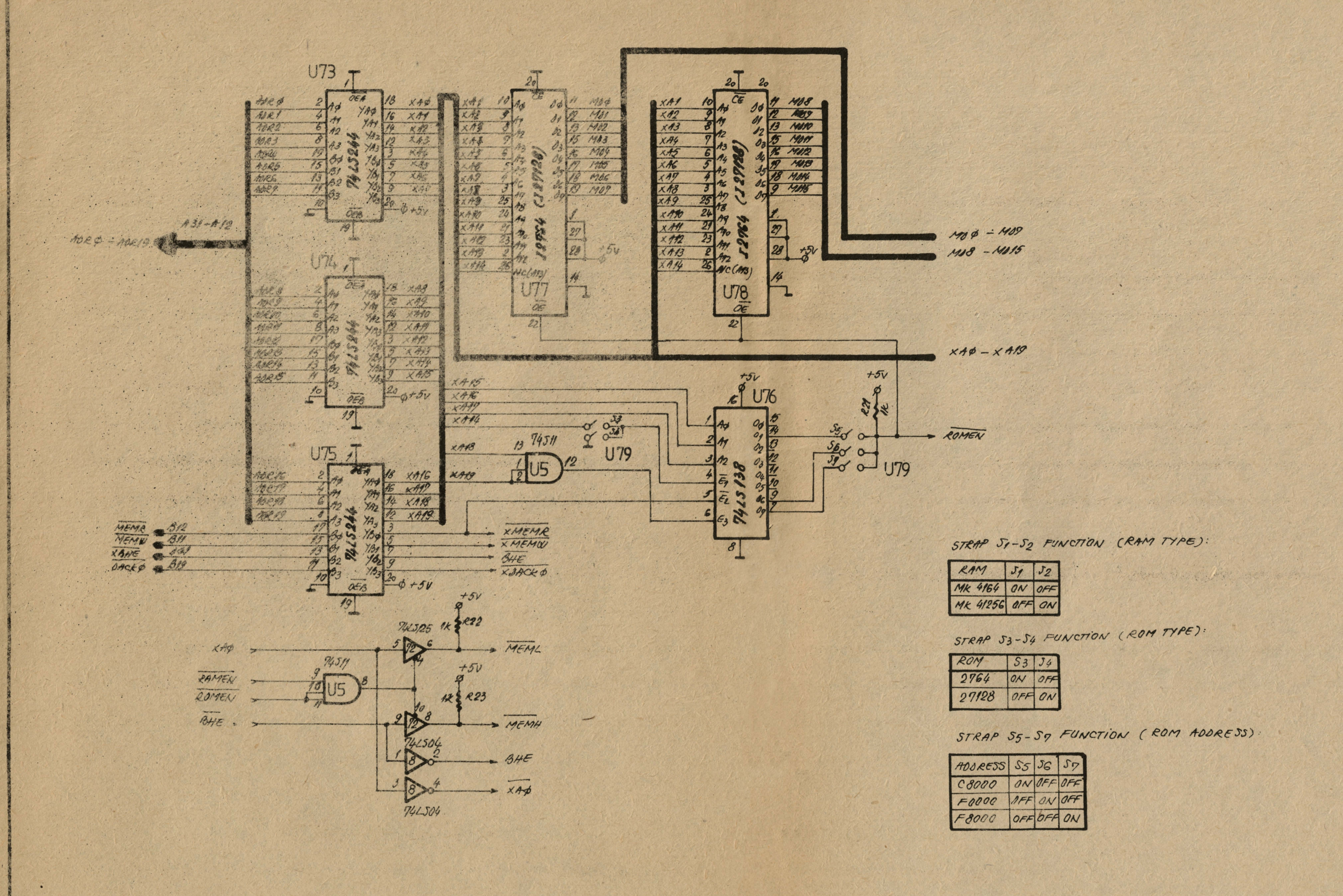


Poz	Simbol	Denumirea	Cod	Observatii	Cant.
36	JSIOA1 JSIOA2	Conector cablu plat tat3 20 contacte	100.183		2
35	JP	Conector RACK 25 contacte mamă	200.856		1
34	U7	Soclu circuit integrat 24 pini	979 19019		1
33	U24	Soclu circuit integrat 40 pini	979 19021		1
32	C13 ÷ C25	Condensator 1nF /10% /50V	MC 3203		13
31	C1 ÷ C12	Condensator 330pF /10% /50V	MC 3202		12
30	R8, R11	Rezistență 5,6K /5% / 0,25 W	RPM 3028		2
29	R7, R10	Rezistență 100Ω /5% / 0,5 W	RPM 3050		2
28	R6, R9	Rezistență 49,9Ω /1% / 0,5 W	RPM 3050		2
27	R3, R4, R12	Rezistență 390Ω / 5% / 0,25 W	RPM 3025		3
26	R1, R2, R5, R13, R14	Rezistență 4,7KΩ / 5% / 0,25 W	RPM 3025		5
25	RR2	Rețea rezistivă 8 × 4K7	RR 3000		1
24	RR1	Rețea rezistivă 8 × 1K	RR 3000		1
23	Q	Cuarț 18,432 MHz			1
22	D1, D2	Diodă	1N4148		2
21	U31, U32	Optocuplor	ROL 64		2
20	U24	Circuit integrat	Z80-SIO	U856	1
19	U7	Circuit integrat	I8253	KR 580 VI53	1
18	U27, U29, U30	Circuit integrat	ROB 1489		3
17	U25, U26	Circuit integrat	ROB 1488		2
16	U9, U13	Circuit integrat	CDB 406		2
15	U4	Circuit integrat	74S04	K531 LN1	1
14	U20	Circuit integrat	74LS30	K555 LA2	1
13	U18	Circuit integrat	74LS08	K555 LI1	1
12	U16, U28	Circuit integrat	74LS04	K555 LN1	2
11	U15	Circuit integrat	74LS14	K555 TL2	1
10	U10	Circuit integrat	74LS155	K555 ID4	1
9	U11, U17	Circuit integrat	74LS32	K555 LL1	2
8	U6, U12	Circuit integrat	74LS74	K555 TM2	2
7	U5	Circuit integrat	74LS90	CDB 490	1
6	U21, U22	Circuit integrat	74LS138	K555 ID7	2
5	U3, U23	Circuit integrat	74LS125	K555 LP8	2
4	U2	Circuit integrat	74LS174	K555 TM9	1
3	U19	Circuit integrat	74LS245	K555 AP6	1
2	U8, U14	Circuit integrat	74LS244	K555 AP5	2
1	U1	Circuit integrat	74LS374	K555 IR23	1

Poz.	Simbol	Denumirea	Cod	Observatii	Cant.
50	S1 - S16	Microîntrerupător	220.025		8
49		Șaibă izolatoare	211010xx		6
48		Piuliță hexagonală M2,5	316.110.025		4
47		Șaibă plată ϕ2,5	332.110.025		4
46		Șurub M2,5 × 12	303.112.512		4
45		Șaibă plată ϕ3	332.110.030		4
44		Piuliță hexagonală M3	316.110.030		4
43		Șurub M3 × 6	STAS 10295/80		4
42	SW	Microîntrerupător	220.025		8
41	C26, 30, 31, 37, 42	Condensator 10µF /16V /10%	CTSP [illegible]		5
40	C27, 29, 31-36, 38-43	Condensator 100nF /10% /50V	MX 3208		13
39		Ureche cu filet	400.0[illegible]		2
38		Circuit imprimat	703.[illegible] 051	Rev B	1
37		Bară conector 25 contacte	703.110.005		1

Produs:	JUNIOR -XT		Cod: 703
IEPER	Rev.	703 910 050	Data: 21.11.'88
APTG	B	SPA	Fila: 1/1


74S158
74LS245
74S280
MK 4164 (MK 41256)
MK 4164
U10-U18
U19-U27
U28-U36
U37-U45
U46-U54
U55-U63
74LS138
U68
U79
74LS74
U70
74LS125
U72
DATAϕ - DATA15
ADRSEL
MEML
MEMH
PARLIN
PARLOUT
RAMEN
XMEMR
XMEMW
XA1-XA18
Produs: JUNIOR-XT
Cod: 703
IEPER
Rev.
703.910.040
Data: 10.07.87
APTG
ϕA
RAM EXPANSION
Fila: 1/2



STRAP S_1-S_2 FUNCTION (RAM TYPE):

RAM	S_1	S_2
MK 4164	ON	OFF
MK 41256	OFF	ON

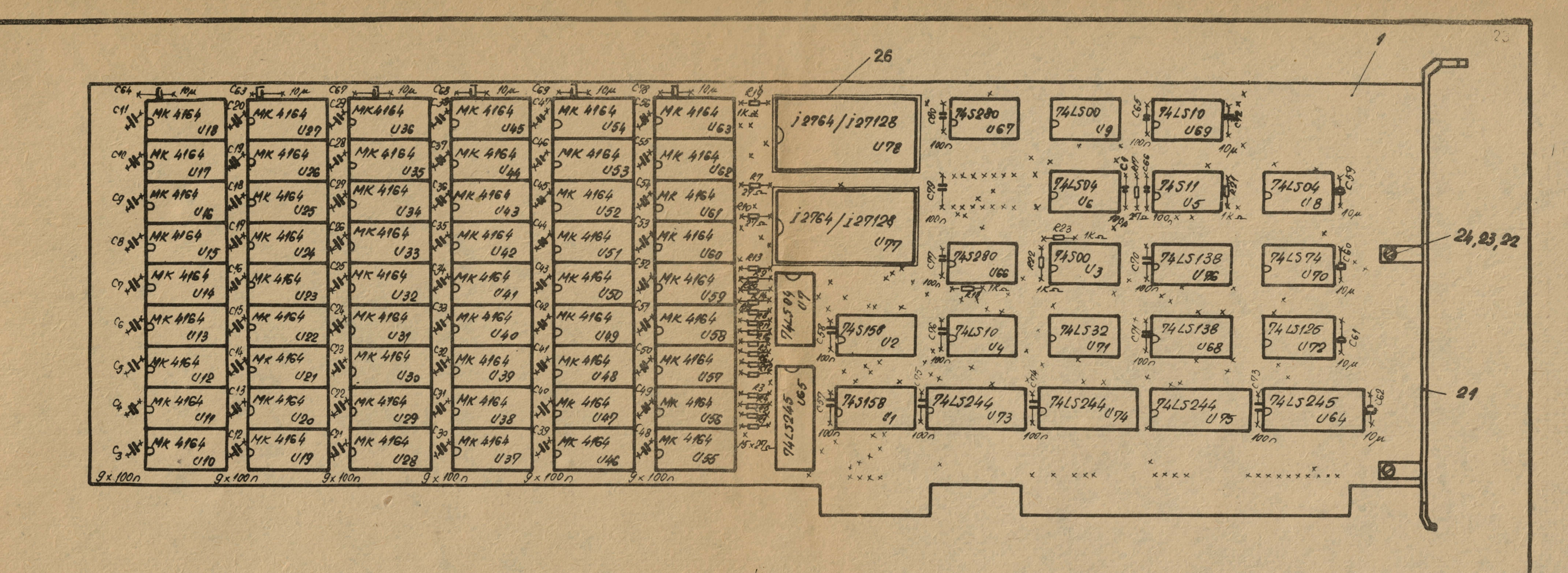
STRAP S_3-S_4 FUNCTION (ROM TYPE):

ROM	S3	S4
2764	ON	OFF
27128	OFF	ON

STRAP S5-S7 FUNCTION (ROM ADDRESS):

ADDRESS	S5	S6	S7
C8000	ON	OFF	OFF
F0000	OFF	ON	OFF
F8000	OFF	OFF	ON

Produs:	JUNIOR - XT		Cod: 703
IEPER	Rev.	703.910.040	Data: 10.07.'87
APTG	Φ;A	RAM EXPANSION	Fila: 2/2

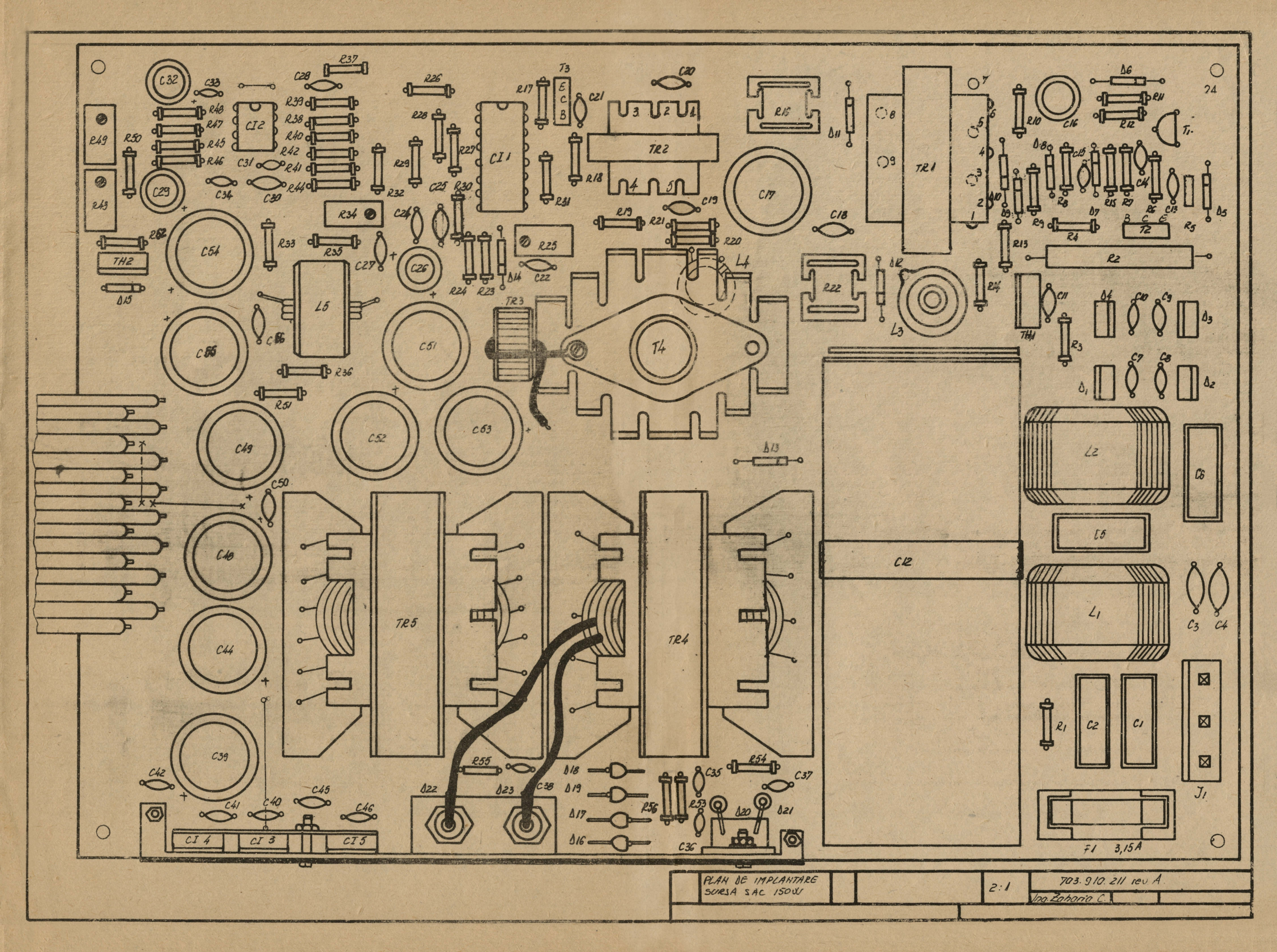


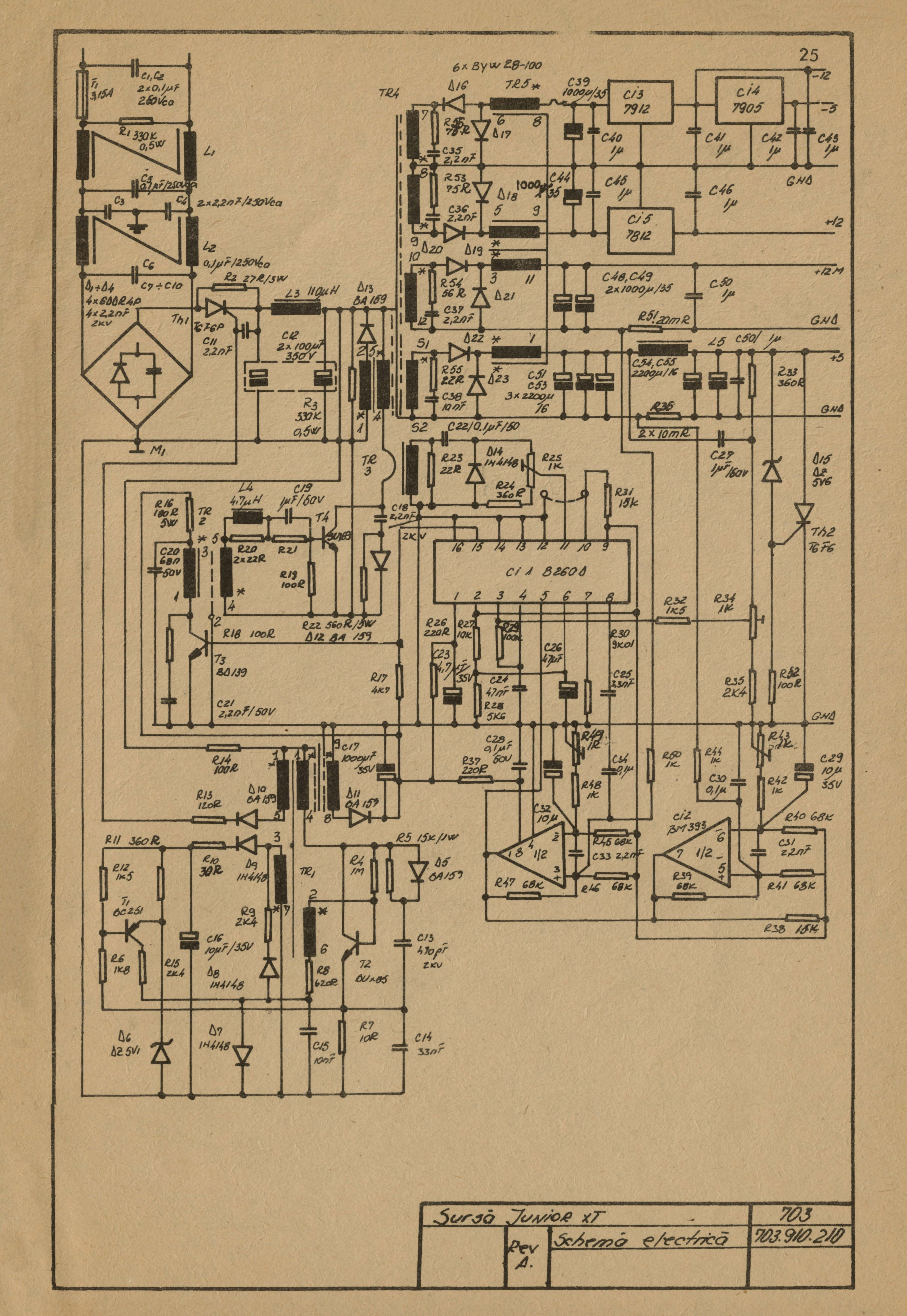
NOTĂ: Circuitele integrate și soclurile de la pozițiile U96, U77, U78 nu se plantează decît pentru extensie de ROM

Poz	Simbol	Denumirea	Cod	Observatii	Cant
26	U77, U78	Soclu circuit integrat 28 pini	77919020		2
25	U77, U78	Circuit integrat	i2764/i27128		2
24		Piuliță M3	316.110.030		2
23		Șaibă Ø3	332.110.030		4
22		Șurub M3x6	STAS 10295/80		2
21		Bară conector tip 4	703.110.009		1
20	R18, R19 R21 - R23	Rezistență 1KΩ / 5% / 0,25W	RCG 3025		5
19	R1 - R17, R20	Rezistență 27Ω / 5% / 0,25 W	RCG 3025		18
18	C1	Condensator 100pF / 10% / 50 V	MC 3202		1
17	C63, C64, C67, C68 C69, C70, C72, C59-C62	Condensator 10µF / 10% / 16 V	TSP 1042		11

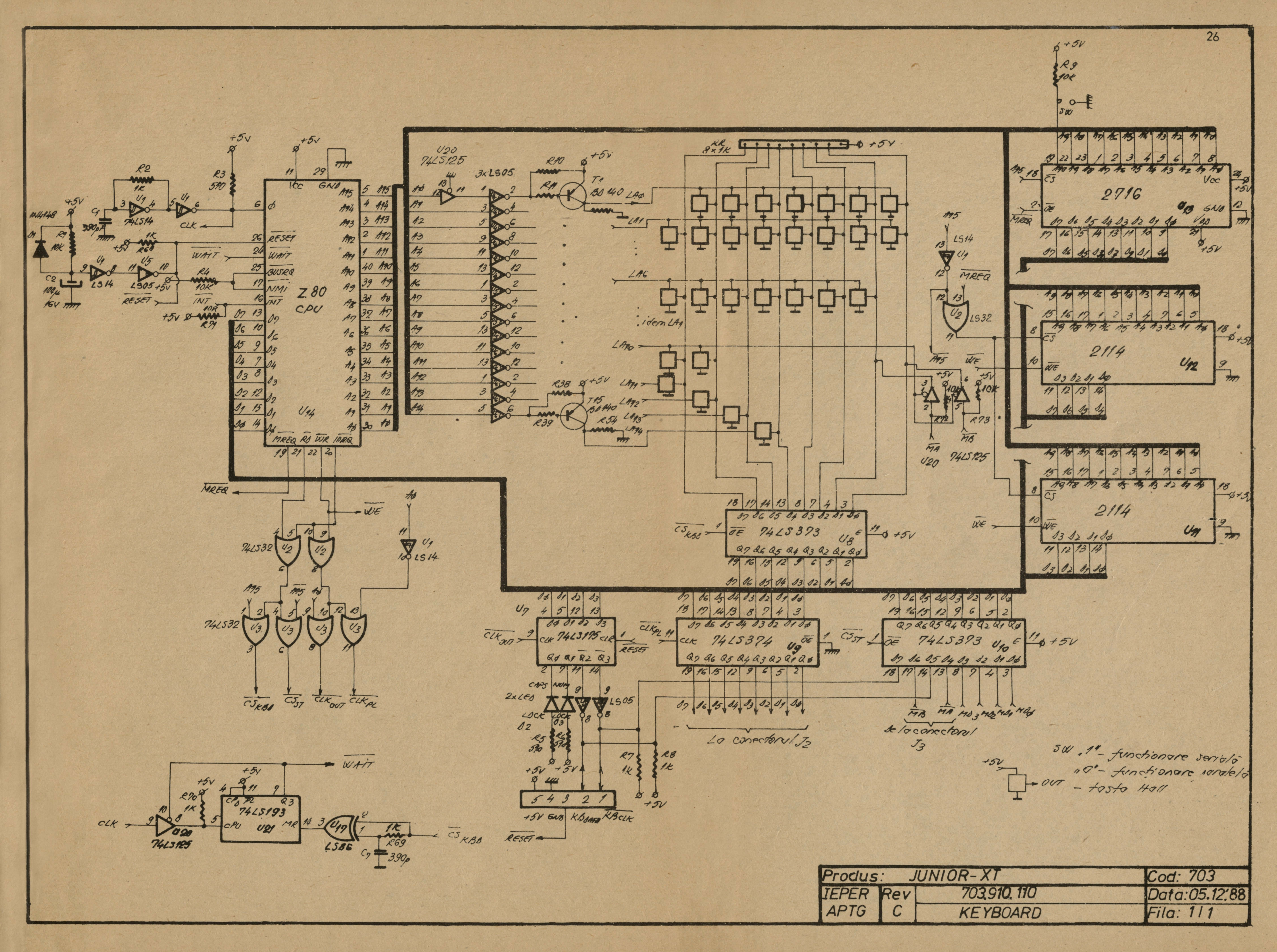
Poz	Simbol	Denumirea	Cod	Observatii	Cant
16	C3-C58, C65, C66, C70, C71, C73-C77, C79, C80	Condensator 100 nF / 10% / 50 V	MX 3203		67
15	U1, U2	Circuit integrat	74S158/ 74S258	K 531 KP14 P	2
14	U73-U75	Circuit integrat	74LS244	K555 AP5	3
13	U64, U65	Circuit integrat	74LS245	K555 AP6	2
12	U71	Circuit integrat	74LS32	K 555 LL1	1
11	U9	Circuit integrat	74LS00	K 555 LA 3	1
10	U5	Circuit integrat	74S11	K 531 LI 3	1
9	U4, U69	Circuit integrat	74LS10	K 555 LA 4	2
8	U3	Circuit integrat	74S00	K 531 LA 3	1
7	U6, U7, U8	Circuit integrat	74LS04	K 555 LN 1	3
6	U70	Circuit integrat	74LS74	K 555 TM 2	1
5	U72	Circuit integrat	74LS125	K 555 LP 8	1
4	U68, U96	Circuit integrat	74LS138	K 555 ID 7	2
3	U66, U67	Circuit integrat	74S280	K 531 IP 5	2
2	U10 - U63	Circuit integrat	MK 4164	K 565 RU5G	54
1		Circuit imprimat	703.910.041 Rev A.		1

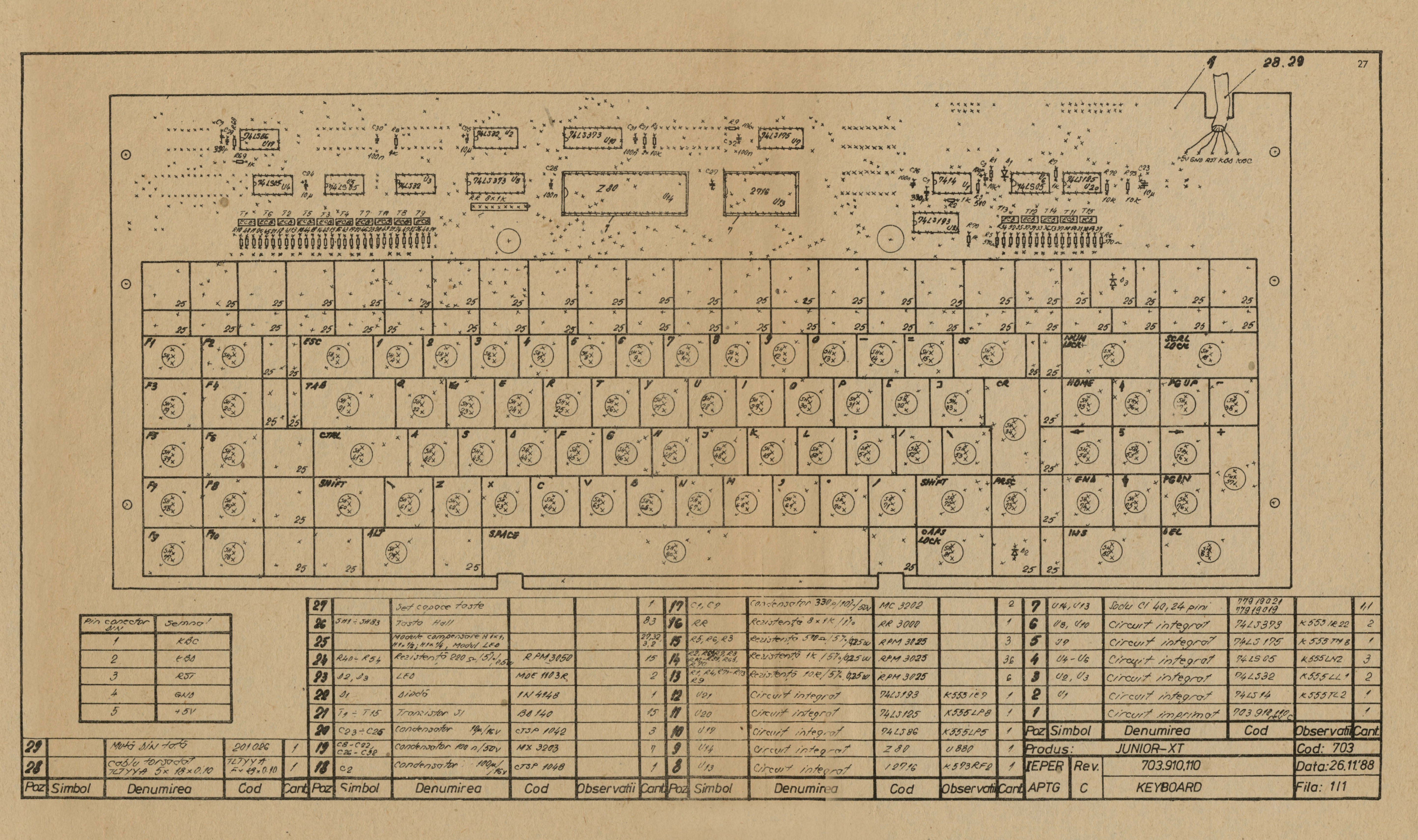
Produs: JUNIOR-XT			Cod: 703
IEPER	Rev.	703 910040	Data 21.11.88
APTG	A	RAM EXPANSION	Fila: 1/1


C32
R37
C33
C28
R26
R17
T3
E
C
B
C21
C20
R16
Δ6
R11
R12
T1
C16
R10
R48
R47
R45
R46
CI2
R39
R38
R40
R42
R41
R44
C31
C34
C30
R49
R50
C29
R28
R29
R27
CI1
R18
TR2
C17
Δ11
TR1
R32
C25
R30
R31
C24
R34
C19
R19
R21
R20
C18
R13
R4
T2
R2
R5
Δ5
R52
TH2
Δ15
C54
R33
R35
C27
C26
R25
C22
R24
R23
Δ14
TR3
L4
R22
Δ12
L3
R14
C11
TH1
R3
Δ4
C10
C9
Δ3
C55
L5
C56
C51
T4
R36
R51
C52
C63
C7
C8
Δ1
Δ2
Δ13
L2
C6
C49
C50
C48
C5
C12
TR5
TR4
L1
C3
C4
C44
R1
C2
C1
J1
C39
R55
R54
Δ18
Δ19
Δ17
Δ16
C35
C37
R56
R53
Δ20
Δ21
C36
C42
C41
C40
C45
C46
CI 4
CI 3
CI 5
Δ22
Δ23
C38
F1 3,15A
PLAN DE IMPLANTARE
SURSA SAC 150W
2:1
703.910.211 rev A
Ing. Zaharia C.



Sursă Junior XT		703
	Rev A. Schemă electrică	703.910.210


Z80
CPU
U14
74LS14
LS05
74LS125
U20
3xLS05
BD140
idem LA1
8x1K
+5V
2716
U13
2114
U12
U11
LS32
74LS373
U8
74LS374
U9
U10
74LS175
U7
74LS32
U2
U3
LS14
CS KB1
CS ST
CLK OUT
CLK PL
2xLED
CAPS LOCK
NUM LOCK
La conectorul J2
de la conectorul J3
74LS193
U21
LS86
U17
74LS125
WAIT
RESET
MREQ
WE
CLK
SW „1" - funcționare serială
„0" - funcționare paralelă
OUT - tasta Hall
Produs: JUNIOR-XT
Cod: 703
IEPER APTG
Rev C
703.910.110
KEYBOARD
Data: 05.12.88
Fila: 1/1



Pin conector DIN	Semnal
1	KBC
2	KBD
3	RST
4	GND
5	+5V

Poz	Simbol	Denumirea	Cod	Observatii	Cant.
29		Mufă DIN tată	201026		1
28		cablu torsadat TLTYYA 5× 18×0.10	TLTYYA 5×18×0.10		1
27		Set capace taste			1
26	SH1 ÷ SH83	Tastă Hall			83
25		Module compensare H1×1, H1×1/2; H1×1/4, Modul LED			27,32, 3,2
24	R40 ÷ R54	Rezistență 220 Ω/5%/0,25w	RPM 3050		15
23	D2, D3	LED	MDE 1103R		2
22	D1	Diodă	1N 4148		1
21	T1 ÷ T15	Tranzistor Si	BD 140		15
20	C23 ÷ C25	Condensator 10µ/16V	CTSP 1042		3
19	C8 - C22, C26 - C32	Condensator 100 n/50V	MX 3203		7
18	C2	Condensator 100µ/16V	CTSP 1048		1
17	C1, C9	Condensator 330p/10%/50V	MC 3202		2
16	RR	Rezistență 8×1K /1%	RR 3000		1
15	R5, R6, R3	Rezistență 510Ω/5%/0,25w	RPM 3025		3
14	R2, R69, R9, R8, R11-R39, R68, R70	Rezistență 1K /5%/0,25w	RPM 3025		36
13	R1, R4, R71-R73, R9	Rezistență 10K/5% 0,25w	RPM 3025		6
12	U21	Circuit integrat	74LS193	K555IE7	1
11	U20	Circuit integrat	74LS125	K555LP8	1
10	U19	Circuit integrat	74LS86	K555LP5	1
9	U14	Circuit integrat	Z 80	U 880	1
8	U13	Circuit integrat	I 2716	K573RF2	1
7	U14, U13	Soclu CI 40, 24 pini	77919021 77919019		1,1
6	U8, U10	Circuit integrat	74LS373	K555IR22	2
5	U9	Circuit integrat	74LS175	K555TM8	1
4	U4 - U6	Circuit integrat	74LS05	K555LN2	3
3	U2, U3	Circuit integrat	74LS32	K555LL1	2
2	U1	Circuit integrat	74LS14	K555TL2	1
1		Circuit imprimat	703.910.110 Rev.C		1

Produs:	JUNIOR-XT		Cod: 703
IEPER	Rev.	703.910.110	Data: 26.11.'88
APTG	C	KEYBOARD	Fila: 1/1